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INDIAN DIALECTICS

Methods of Philosophical Discussion

Volume I

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Saṁ gacchadhvaṁ saṁ vadadhvaṁ,
saṁ vo manāṁsi jānatām.
—RV. 10.191.2

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PUBLISHER'S NOTE

The Institute has been publishing research works on various subjects of Indology.

We have great pleasure in publishing *Indian Dialectics* by Dr. Esther A. Solomon. She got her doctorate in Sanskrit by preparing a thesis on *Avidyā* under the guidance of Prof. R. C. Parikh who was then the Director of this Institute, where she functioned as a postgraduate teacher and Asstt. Director for some years. In 1961-64 she got the Senior Fellowship of the University Grants Commission for doing research on Indian dialectics. As a diligent scholar of Indian Philosophy, I feel, Dr. Solomon has ingeniously treated the subject, which was a live phenomenon in the intellectual life in ancient India, with full patience and perseverance.

Shri Chinubhai Chimanbhai, the President of Sheth B. J. Institute Trust Executive Committee, appealed to some gentlemen for contributing donations conducive to the function of our publications and collected an initial fund of Rs. 36,500/- in 1973–74. We acknowledge our sincere thanks to all the donors who complied with the appeal of Shri Chinubhai and contributed to this fund. We hope well-to-do persons and concerns will continue to patronise our academic activities not infrequently. Prof. R. C. Parikh, the ex-Director of the Institute, has planned a project for the publication of several works of this type and we hope Shri Chinubhai Chimanbhai will spare no pains in the collection of adequate funds for the successive publications. We are also grateful to both of them for taking keen interest in this project,

As the work is bulky, we publish Volume I separately. Volume II is in the Press.

We hope this publication will prove to be interesting to all those who are interested in Indian logic and philosophy.

R. C. Marg,
Ahmedabad-380009
August 24, 1976

Hariprasad G. Shastri
Director
B. J. Institute of Learning & Research

PREFACE

While I was collecting material and preparing notes for my doctoral thesis on '*Avidyā and the Cognate Concepts in Vedic, Buddhist and Jaina Darśanas*' (published as '*Avidyā—A Problem of Truth and Reality*'), I happened to be attracted by the exposition in the *Nyāya-sūtra* of the types of debate, the way of furthering the cause of knowledge, the tricky devices adopted in debates, the grounds of censure or defeat and the like topics, and felt that hardly any attention had been devoted to these. Whenever I took up the *Nyāya-sūtra* for a careful perusal this idea haunted me, but I did not have the occasion or even the time to pursue this topic. When I read the advertisement about the University Grants Commission Senior Fellowship, in the application for which the subject of research along with a brief outline had to be suggested, I offered the subject of '*Indian Dialectics*' as it was uppermost in my mind. As luck would have it, I got this Senior Fellowship in November, 1961 and this gave me an opportunity to become a student once again, free from administrative and other burdens. I am extremely grateful to the University Grants Commission for awarding me the Senior Research Fellowship from November, 1961 to 14th July, 1964, but for which I would not have been able to pursue this study and present its fruit before those interested in the subject.

As I took up this subject for study and started reading early works, Vedic, Buddhist and Jaina, I found unthought of material for this subject and realised that dialectic has always been a live phenomenon in the intellectual culture of India. Much plodding, not always very interesting or easy nor always paying, has to be gone through before one can come to any conclusion however small it be. This is the lot of all research workers as also their privilege. I have tried to approach the

subject both in its theoretical and practical aspects with special emphasis on the historical and social significance of dialectic and the social factors that contributed to its growth and development. Another consideration that has weighed with me is the chronological and logical development. It has not always been possible to combine these.

I here express my sense of deep gratitude to the *ṛṣis* of India from whose writings this work has got its inspiration and material. Of the modern works I may make special mention of H. N. Randle's *Indian Logic in the Early Schools*, D. M. Datta's *Six Ways of Knowing*, Gaṅgānātha Jhā's translations of *Nyāya-bhāṣya* and *Nyāya-vārttika*, S. C. Vidyābhūṣaṇa's *History of Indian Logic*, S. C. Bagchi's *Inductive Reasoning*, Mookerjee and Tatia's '*A Critique of the Organ of Knowledge*,' Mortimer Adler's '*Dialectic*,' and Pepperell Montague's '*Ways of Knowing*'. I have acknowledged my indebtedness to many others in the text of my work (mostly in the notes at the end of each chapter) and mentioned many more works in the Bibliography.

I cannot find words to express my sense of gratitude to, and reverence for, my *guru* Prof. Rasiklal C. Parikh, Director, B. J. Institute of Learning and Research, Ahmedabad, who has a deep insight into the problems of research, gives guidance with sympathy and patience, the kind of which is rarely to be found, and can inspire his students as only a very few can. Pandit Sukhlalji Sanghavi, a great savant of India, has been another source of inspiration for me. In spite of his old age and physical weakness he guided me with great affection whenever I approached him. I would be ungrateful if I failed to mention Pt Dalsukhbhai Malavania, Director, L. D. Institute of Indology, Ahmedabad, who has gladly given me guidance and unstintingly lent books from his library. I am also thankful to the authorities of the Gujarat Vidya Sabha and the members of the staff of the library of the B. J. Institute of Learning and Research, Ahmedabad, for allowing me to use as many books as I required at a time.

I crave the indulgence of the readers for any drawbacks in this work for which I alone am responsible, and seek forgiveness for any debt that may have remained unacknowledged I hope this work will in its modest way contribute to the understanding of Indian Logic and Dialectic and show what a live phenomenon the debate has been in the intellectual life of India. It has been my effort to present the dialectical discussions mostly as they are found in the original texts so as to be able to present a faithful picture of them; hence I have, even at the risk of becoming tiresome, given an almost literal translation of passages, though this does not make good reading, and though I am also conscious that a freer discussion of certain topics would have done more justice to them. I hope the purpose of my giving literal translations and profuse references will be appreciated by critical scholars who would usually like to examine textual evidences for the statements put forth.

33, Nehru Nagar
Ahmedabad–6
14th June, 1965

E. A. Solomon

I am highly thankful to Shri Chinubhai Chimanbhai, President of the Gujarat Vidya Sabha, for sparing no pains in the collection of donations for the publication of this work. I may mention that it was again my *guru* Shri Rasiklal C. Parikh who drew Shri Chinubhai's attention to the importance of a work on such a subject; and lover of learning as he is, he picked up the hint and immediately set about his mission. Afterwards, I found to my surprise and joy that he was more keen than I about the speedy printing and publication of this work. I am also thankful to Dr. Hariprasad G. Shastri, present Director, B. J. Institute of Learning and Research for willingly undertaking to arrange for the publication of this work.

Since this work on ' Indian Dialectics ' happens to be quite voluminous. it was decided to publish it in two volumes, this first volume consisting of Part I of nine Chapters, and three chapters (10–12) of Part II. These twelve chapters give an idea of the tools of debate and its procedure. The second volume will deal with the problem of the possibility of attaining knowledge, the problem of truth, growth of dialectical thought as observed in philosophical works, methodology of Navya-Nyāya, dialectic in other *Vidyās*, and some actual debates that have been recorded or described.

I must express my thanks to the Proprietor of the Shri Swaminarayan Mudrana Mandir for undertaking to print this work and ungrudgingly and patiently accepting my suggestions.

E. A. Solomon

33, Nehru Nagar
Ahmedabad-380015
Gujarat, India
1st September, 1976

SCHEME OF TRANSLITERATION

अ–a,	आ–ā,	इ–i,	ई–ī,	उ–u,	ऊ–ū,
ऋ–ṛ,	ऌ–ḷ,	ए–e,	ऐ–ai,	ओ–o,	औ–au,

क्–k,	ख्–kh,	ग्–g,	घ्–gh,	ङ्–ṅ,
च्–c,	छ्–ch,	ज्–j,	झ्–jh,	ञ्–ñ,
ट्–ṭ,	ठ्–ṭh,	ड्–ḍ,	ढ्–ḍh,	ण्–ṇ,
त्–t,	थ्–th,	द्–d,	ध्–dh,	न्–n,
प्–p,	फ्–ph,	ब्–b,	भ्–bh,	म्–m,
य्–y,	र्–r,	ल्–l,	व्–v,	
श्–ś,	ष्–ṣ,	स्–s,	ह्–h,	

ं–ṁ or ṃ, : –ḥ

CONTENTS

DIALECTIC — INTRODUCTORY

The term 'dialectic'

Dialectic (Latin from Greek *dia+legein,* discourse) signifies the art of discussion (Aristotle) or of logical controversy. Aristotle is said to have attributed the beginning of dialectic, the art of disputation by question and answer, to Zeno (fifth century B.C.) of Elea. The justification of this remark is found in the fact that Zeno defends the position of his school by showing through a process of reasoning that the opponent's view involves him in absurd and contradictory conclusions. The art of debate can be said to have begun with the pre-Socratic Sophists (fifth–fourth century B.C.) and to have reached its proper dialectical form in the Socratic dialogues of Plato. The Sophists were the teachers of the art of eloquence and debate. Debate is concerned with some unsolved or controversial problem, so their art of debate ultimately resulted in the formulation of the laws of valid reasoning or logic. Socrates (469–399 B.C.) used the dialectical method to show the inadequacy of popular beliefs and even elicit truth from the pre-conceptions of those with whom he argued. He would ask for a definition of the subject under discussion and then test it by cross-questioning his interlocutor. He would show that the definition was too narrow by producing instances to which it did not apply, with the result that it was discarded in favour of another which preserved all the merits of the previous one even while overcoming all its drawbacks. With Socrates dialectic was thus an art of investigating a subject by means of conversation between two or more persons, each of whom contributed something to the result by proposing definitions or drawing attention to certain aspects of the subject or certain negative instances that had been

overlooked. Xenophon (*Memorabilia,* Chapter 5) tells us that Socrates said that dialectic was so called because it was an inquiry pursued by persons who took counsel together, separating the subjects considered according to their kinds.[1]

Plato's own dialogues are good specimens of the art of dialectic. Plato (427–347 B.C.) extended the use of the term 'dialectic' and made it the science of first principles which dispenses with hypotheses and is 'the coping stone of the sciences', as the highest because the clearest and hence the ultimate source of knowledge (*Republic,* Book 5). For Plato, then, dialectic is the term used to describe all logical thinking. Plato is responsible for the term 'dialectic' which signifies the processes of discursive or conversational thinking. 'Sophistry', though it later became a word of derogation, has been employed as a synonym of 'dialectic', and 'Scholasticism' which also was held up to ridicule at a later period. But all these three signify a method of argument, controversy or disputation. Plato developed dialectic metaphysically in connection with his doctrine of 'Ideas' as the art of analysing ideas in themselves and in relation to the ultimate idea of the Good (*Republic,* Book 7).

Aristotle (384–322 B.C.) differed from Plato in using the term for the science of probable reasoning as opposed to demonstrative reasoning; otherwise he accepted the Platonic conception of it as the argumentative process whereby a comprehensive theory of first principles can be constructed through the criticism and modification of other men's conflicting doctrines. Aristotle described dialectic as the method of dealing with what is merely probable or of arriving at what is most likely to be true in cases where definite demonstration is impossible. He distinguished between dialectical reasoning, which proceeds syllogistically from opinions generally accepted, and demonstrative reasoning, which begins with primary and true premises; but he held that dialectical reasoning in contrast with eristic is 'a process of criticism wherein lies the path to the principles of all inquiries'. " Aristotle him self used

'dialectic' as opposed to 'science' for that department of mental activity which examines the presuppositions lying at the back of all the particular sciences. Each particular science has its own subject-matter and special principles on which the super-structure of its special discoveries is based. The Aristotelian dialectic, however, deals with the universal laws of reasoning which can be applied to the particular arguments of all the sciences".[2] Dialectic sets forth the conditions which all definitions must satisfy whatever their subject-matter. Moreover, the sciences all seek to educe general laws; dialectic investigates the nature of such laws and the kind and degree of necessity to which they can attain. Aristotle gave the name 'Topics' to this general subject-matter. Dialectic in this sense is the equivalent of logic. The Stoics divided logic into rhetoric and dialectic and from their time till the end of the tmiddle ages dialectic was synonynous with or a part of logic.

All these thinkers regarded dialectic as both a method of establishing positive results and also a process of negative criticism. But the Eleatics used it purely negatively and destruc ively. This along with the use of it by the Sophists so as to show off their skill by playing upon words and the like devices led to dialectics being frequently regarded as an empty or sophistical art of playing with words or operating with concepts that have no real meaning or content, and the dialectician as a disputatious person.[3] Some of the schoolmen of the Middle Ages were also responsible for this impression.

Coming to modern philosophy, Kant (1724-1804) in the *Critique* of *Pure Reason* employed the word to denote "the false pretense of knowledge that is based on illegitimate concepts that have no real basis in experience."[4] He named the third main division of his work 'Transcendental Dialectic' and discussed the impossibility of applying to 'things-in-əthm selves' the principles which are found to govern phenomena. He criticised the attempt to attain metaphysical truths by pure reasoning independently of experience. Kant argued that such an attempt necessarily resulted in reasoning's becoming

dialectical or subject to illusions,—for example, through producing formally valid arguments in favour of contradictory propositions.

Hegel (1770–1831), on the other hand, contended that contradictions are inevitable because thinking always begins with a thesis, which with the progress of thought is confronted by an anti-thesis, both the thesis and the anti-thesis being partial and abstract conceptions of their object. But this contradiction is, according to Hegel, a challenge to think further and to evolve a concrete synthesis which reconciles the first two and overcomes their drawbacks. This movement of thought from thesis through antithesis to synthesis Hegel called dialectic. Hegel developed this into a universal method of procedure, and since he regarded thought or idea as the structure of nature and history, he regarded dialectic as a metaphysical principle that exhibits both the development of the thought-process and also the nature of reality, Marx and Engels borrowed the method of their dialectic from Hegel, The term 'dialectical' in 'dialectical materialism' expresses the dynamic interconnectedness of things and the universality of changes. Everything real is in the process of self-transformation because content is made up of opposing forces, the internal movement of which interconnects everything and changes each thing into something else.[5]

Practical and theoretical value of dialectic

In this work, the term 'dialectic' is not used in any metaphysical sense or in the sense of a metaphysical process, but in its primary sense in which it is also used by Greek philosophers like Aristotle—the art of discussion, debate, controversy, a method of argument or disputation, the process of discursive or conversational thinking. Like every other achievement of humanity, dialectical thinking is also a social fact. It is only when two persons converse on a subject of common interest that thought, through question and answer or doubt and its resolution, attains more clarification and makes progress.

When this mode becomes habitual in an individual, one and the same mind carries on a conversation with itself and develops a dialectical mode of thought. Dialectic involves a duality of minds. It actually originates in ordinary conversation and disputes. As thought develops a mind can dispute with itself and it then indulges in dialectical thinking. We find that in the early stages of philosophical thinking both in Greece and in India the dialectical mode of presenting ideas has thus evolved. That this mode of thought-development was current in the early stages of philosophical thinking can be gathered not only from references to actual debates but also from the fact that the earlier philosophical writings have been in the form of dialogues both in Greece and in India. It will be found that in India this mode of exposition has its reflection in what is known as the 'iti cet' ('If it be argued') method, wherein an argument of the opponent is anticipated and answered.

The controversial method has its own use as a mental training. The Sophists were teachers of eloquence and argument and regarded disputation as an end in itself. They argued in order to show their pupils how arguing should be done and victory won. They often took up an idea or concept with a view to showing that it was full of contradictions. No subject was sacred to them. They raised problems in the sphere of politics, ethics, religion—questions the mere discussion of which in the eyes of the old-fashioned was impious and depraving. Like Abelard considered to be the mediaeval counterpart of such a teacher as Protagoras, the Sophist, they thought that every question could be argued for or against. The Śramaṇas of the post-Upaniṣadic period—contemporaries of Buddha and Mahāvīra, viz. Makkhali Gosāla and others—can be said to be the Indian counterparts of these sophists, though they might not have been professional teachers of eloquence. They contended that there is nothing like *pāpa* (sin, evil) or *puṇya* (good). One does not incur any *pāpa* by killing someone nor, any *puṇya* by charity and the like so-called good deeds. This controversial mode has its own aberrations

as can be seen in the later sophists and some of the schoolmen of the middle ages who may be called wranglers. At the first glance this critical aberration seems to be wholly destructive and its immediate effects may have been pernicious. All the same, it has played an important part in the clarification of issues. As the sophists practised and taught dialectic, the relativity of human ideas and purposes presented itself to their consciousness so clearly and forcefully that they disowned inquiry as to the existence of a universally valid truth and so fell into a scepticism, which may have ultimately become a necessity of scientific inquiry. Socrates opposed to this faith in reason and a conviction of the existence of a universally valid truth. The opposition between Socrates and the Sophists formed the starting point for Platonic thought. Gradually attention and emphasic shifted to the general forms of the thought-process itself and the immediate aim of the Aristotelian logic was entirely methodological. As in rhetoric the art of persuasion is taught, so in logic we learn the art of scientific investigation, cognition and proof. The Aristotelian school regarded logic as the general instrument for all scientific work. Thus it was mainly owing to the background prepared by the Sophists that Aristotle could formulate his logic and also draw attention to a clearly marked difference in the matter of our thought. He saw, as noted above, that relatively few problems belong like those of mathematics to the sphere of what is strictly demonstrable and that on the vast mass of questions which puzzle and are of interest to mankind we can have discussion but never certainty. Discussion or dialectic in the Platonic and Aristotelian sense developed into a vehicle of philosophical inquiry in Western thought. We shall see that in Indian thought also theories of truth and validity of knowledge were specifically formulated after the Mādhymikas and sceptical thinkers challenged the validity of empirical cognition and the efficacy of the organs of knowledge to yield truth. They took the clue for this from Sañjaya Belaṭṭhaputta and others contemporaneous with Buddha and Mahāvīra.

As Prof. Edward Caird tells us, Kant was keenly alive to the uses of the controversial method as a mental training, and in 1758 he announced to his class on metaphysics that on two days in the week he would treat polemically the doctrines expounded on previous days, this being one of the most excellent means to attain to profound views on any question (*Critical Philosophy of Kant*, i. 162). This polemical method consisted in first proving a proposition and then trying to prove its opposite—an exercise of the intellect to which attention has often been devoted in schools of learning with a view to cultivating a high standard of controversial ability. Kant derived this benefit from the polemical method that it rivetted into the attitude of criticism his mind which was already critical, even sceptical. Kant regarded it as a touchstone to test what is knowable and to expose the illusions of the understanding.

Controversy has a practical as well as a theoretical value inasmuch as it sharpens the faculties and clears up the confusion in the mind. Contradiction whether it proceeds from conviction or not is always stimulating and even a superficial discussion of most questions is enlightening. When however a controversy is carried on in a spirit of honest inquiry it is of great value as it dispels prejudices. We start, most of us, knowing but one side of controverted questions. An argument with an intellectual opponent shows us the other side and exposes the weakness or strength of both positions. But there is a deeper significance also. In a controversy, truth comes into collision with error and we can acquire new truth only thus. Progress can best be ensured by unlimited freedom of discussion. Every theory, however sound and well-cut, has its limitations. In the progress of thought, dogmatism, criticism, scepticism follow one another and are succeeded by dogmatism-a new dogmatism-again. In this struggle of one theory with another, the way gradually keeps on becoming clearer and clearer and the fresh starting point is always a little higher. Human intelligence being limited and fallible, all this can come about only

in this way.[6] Dialectical discourse inevitably leads to philosophical, theoretical or speculative considerations. Philosophical or theoretical problems not only originate and are capable of being explained by dialectic, but the nature of philosophy also is essentially dialectical. Ordinary human conversations thus discover dialectic and philosophy at the same time. To be thoroughly a dialectician in conversation or reflection is to be a philosopher engaging in the partisanship of controversy but never losing the sensitivity to truth.

Now, language (ordinary and non-technical) plays an important part in thinking. As a matter of fact, it is the contention of Indian grammarians that there can be no idea without the word expressing it being invariably present—may be unmanifestedly. Conversation—intended to establish or dispose of opinions and therefore called argumentative or polemical—is a kind of thinking in which an individual mind can indulge only through the mutual participation of one or more other minds as said above. Thought, as a matter of fact, can be said to develop in conversation, and dialectic is therefore conditioned by some factors present in the very constitution of language which is its instrument or vehicle. These factors are mainly (*i*) the variability of the discursive meanings of words, (*ii*) the funded definitions of the common vocabulary of the language, (*iii*) the conflicting claims of the denotative and connotative reference of terms, (*iv*) the restraint upon absolute freedom in definition imposed by the denotation of the words of a non-technical language, (*v*) the pervasive metaphorical character of language. Dialectic is never determined, though perhaps limited in its use of a language, by the denotative aspect of the words of that language. (We shall see that many of the devices of debate such as *chala*, quibbling, and *jāti*, sophistical refutation, are based upon the use of certain words). Controversy never arises among facts, but only in the realm of meanings, The use of language, whether for purposes of expression, command, query or communication involves men in controversy because of the connotative ambiguity of words

and the pervasive metaphorical character of language. If controversy occurs for these reasons it never employs language to ask what the facts are, but what they mean. With regard to statements in question, it is asked 'What does it mean to say that....?' Since dialectic is concerned with the interpretation of statements and since interpretation depends upon a context, the validity, as well as the intelligibility of the interpretation, depends upon the context. What may be ambiguities in verbal usage and multiple modes of metaphor in linguistic statement, become conflicts and contradictions in discourse; and dialectic serves the double function of clarifying the use of words on the linguistic side and resolving difficulties in discourse on the logical side.[7]

The detailed tracing of the term 'dialectic' and the value of controversy or dialectic might appear somewhat irrelevant. But it will be clear from what follows that some of these shades and uses are found in one form or the other in Indian thought.

Vāda, saṁbhāṣā, kathā, tarka, śāstrārtha

In India, corresponding to 'dialectic' we have the terms *saṁvāda*, *vāda*, *saṁbhāṣā*, *kathā*, *tarka* and even *śāstrārtha* (dialectical discussion about the precepts of the śāstras). The people of the Vedic period in their excitement to discover and examine first principles took to controversy and discussions. The vogue of controversy can be seen at its height in the post-Upaniṣadic period when no subject was thought too sacred for dialectial criticism and even the efficacy of *pāpa, puṇya* was challenged, as also the possibility of attaining knowledge or rightly expressing the truth of things. This undeniably opened new avenues of controversy and critical examination. Buddha discouraged metaphysical speculations and dialectical discussions in order to avoid the resultant bitterness and enmity. Nevertheless, we find numerous dialogues in the Buddhist *Piṭakas* wherein is given an exposition of several topics and problems by the method of question and answer. The different ways of answering questions are also

mentioned and illustrated. In the Buddhist *Piṭakas* and the Jaina *Āgamas* there are several accounts of controversies with disciples and friendly or rival thinkers. The Jaina scriptures specially mention *vādins* (dialecticians) among the followers of the Tīrthaṅkaras. The business of these vādins was to defend dialectically the teachings of the Tīrthaṅkaras. The ancient Indians, as a matter of fact, were as fond of *vāda* as the Greeks were. They were fully aware of the utility of *vāda* in respect of the protection of knowledge in general, and of one's theories and doctrines, religious, philosophical etc., in particular, and of their clarification and development. The *Upāyahṛdaya* (wrongly ascribed to Nāgārjuna) starts with a plea in favour of the utility of *vāda* as leading to the discipline of the intellect and the determination and propagation of truth, and refutes the view that *vāda* only creates bitterness, strife and hard-heartedness and so should be avoided.

Vākovākya was a subject of study even in the Vedic period. *Vākovākya* is generally interpreted as logic, but it could be better interpreted as question and answer, dialogue or dialectic, the science of criticism, reasoning, argument. *Vākovākya* is mentioned among the subjects for study along with *Ṛk*, *Yajus* and *Sāman* texts in the *Śatapatha Brāhmaṇa* (11.5.7.5,9). And in *Śatapatha Brāhmaṇa* 11.5.6–8, *Vākovākya* is mentioned along with *anuśāsana* (precepts—according to Sāyaṇa, six *Vedāṅgas* or rules of grammar, etymology, etc.), *vidyās* (sciences, perhaps science of snakes, etc), *Itihāsa–Purāṇa* (historical and traditional legends) and *Nārāśaṁsī gāthās* (stanzas praising men) as honey-offering to the gods. Similarly in the *Chāndogya Upaniṣad* (7. 1. 2–4), Nārada is said to have studied a number of *vidyās* including *vākovākya*. In the *Śatapatha Brāhmaṇa* (4.6.9.20), we find a reference to *brahmodya* as held in *vākovākya*. *Brahmodya* meant, as we shall see, a discussion regarding the nature of Brahman or disputation regarding theological and spiritual matters; and the expression '*vākovākya*' suggests, that this discourse was of the form of a controversy and both the parties took an active part in the

discussion criticising each other.[8] *Vākovākya* thus must have initially meant theological discourse or controversy similar to, if not identical with, the numerous brahmodyas or disputations on Vedic matters or riddles. As an example of such a dialogue or discourse, Sāyaṇa refers to the dialogue between Uddālaka Āruṇi and Svaidāyana Śaunaka (*Śatapatha Brāhmaṇa* 11.4.1).[9]

The *brahmodyas* raise queer problems, e.g. regarding the growth, sustenance and decay of teeth in creatures, and mostly try to correlate them with the sacrificial rites and details regarding them. Even the Brāhmaṇas must have been impressed by the magnificence of the huge sacrificial sessions and the mysterious atmosphere that surrounded them, and so were led to find out some deeper significance in them. In the long intervals between the performance of different rites (e.g. in the *aśvamedha* sacrifice), they started thinking on, and discussing about, the inexplicable wonders of the macrocosm and the microcosm, the world at large and the human body, and wondered whether they could find some mystic or occult correlation between them and the significance of the sacrificial rites and ceremonies. Gradually these *brahmodyas* came to be incorporated into the very body of the sacrifice, Though some of these *brahmodyas* might appear puerile to the moderns, they were not so to the sages of old, and what is more, they were the fruits of the inquisitive pursuit of the mind asking questions about each curious phenomenon. This encouraged the spirit of questioning and finding out justifications, as also that of competition in the field of intellectual inquiry and led to the rise of dialectical criticism in the schools of philosophy, grammar and the like.

In the opinion of many scholars, the early Yājñika-Mīmāṁsakas, or those who discussed scientifically about the *Veda* and its meaning and the sacrifices, were the original pioneers in the field of logic and dialectic, and the *pūrvavat*, *śeṣavat*, *sāmānyato-dṛṣṭa* types of inference were originally formulated by the early Mīmāṁsakas, who also perhaps formulated the

syllogism of ten members referred to by Vātsyāyana.[10] Dr S. N. Dasgupta's contention, on the other hand, is that logic and dialectic emerged from the discussions of Āyurveda physicians.[11] He holds that since there is no mention of the development of the art of debate in any other earlier literature it is reasonable to suppose that the art of debate and its accessories developed from early times in the traditional medical schools whence they are found collected in Caraka's work. "The origin of the logical art of debate in the schools of Āyurveda is so natural and the illustrations of the modes of dispute and the categories of the art of debate are so often taken from the medical field that one has little reason to suspect that the logical portions of the Caraka-Saṁhitā were collected by Caraka from non-medical literature and grafted into his work."[12] We may not go so far as to give all the credit to the Āyurveda physicians, but we can certainly say that we have evidence that the school of Yājñika-Mīmāṁsakas and the medical school through their discussions and disputes contributed considerably to the field of logic and dialectic.

We shall see that dialectic has many technical terms in common with *dharmaśāstra* and *arthaśāstra*. The settlement of disputes in courts of law also must have contributed considerably to the development of logic and dialectic. Works of Nyāya assimilated and systematised the rules and principles given by them into a regular theory. The rules of interpretation laid down by the Mīmāṁsakas are no less important in the fixing of the theory and the rules of debate. They were given their due importance in the later days in the settlement of even legal and other disputes.

The Nyāya school uses the term '*kathā*' for debate. This term has an interesting history. It is derived from √*kath*, to converse, discourse, tell. A person says something or expresses his opinion when he is in a group or in the company of others. The occasions for men meeting one another are many—social and religious functions, listening to sermons, etc.

In India people gather together to listen to the episodes of the lives of saints or warriors. Hence '*kathā*' came to mean 'life', 'story' e.g. '*Rāma-kathā*' (life of Rāma). The mode of relating or reading out incidents of such a life was also termed *kathā*. Men naturally talk or discuss things when they assemble on such occasions and even thrash out a point thoroughly if two parties are formed holding different views on the same subject. They put forth arguments in support of their own views, and also to refute the view of the other party. Debate or dialectic springs up from conversation; debate also came to be called '*kathā*' and this meaning of the word was preserved in the śāstric literature of India. '*Kathā*' thus came to signify 'controversy, debate, dialectic'. The term '*sambhāṣā* (used in the *Caraka-Saṁhitā*) is a significant parallel to dialectic, discourse between two persons from which dialectic emerges.

People must have carried on different kinds of debates. Some were debates conducted in a candid spirit for the determination of truth; others were meant to overthrow and put to shame the other party and all sorts of arguments, only bearing the semblance of arguments, were advanced in such debates with the sole purpose of defeating the other party. In certain other cases there was just a volley of arguments, destructive in character and having nothing to establish. Hence the words *vāda, jalpa, vitaṇḍā* became current even before a regular theory of debate was formulated in such works as the *Nyāya-sūtra*. *Jalpa* is not necessarily used in the early literature in the sense which distinguishes it from vāda It means just discourse, debate (√*jalp* = to speak), whereas *vitaṇḍā* means sophistry, sophistical reasoning, irresponsible hurling of arguments (*vi* + √*taṇḍ* = to hit, smash). Even later, especially in Jaina works, jalpa is used to convey the meaning of debate. From all such debates emerged the principles of valid reasoning, and logicians tried to systematically distinguish between valid and invalid arguments, as can be seen from the list of *jātis* (sophistical arguments) given in

works on logic. Gradually the treatment of *jātis* gave place to a systematic treatment of valid reasoning alone.

General Scheme

The idea of dialectic, as said above, starts from argument between two or more persons. A deliberate consideration of the nature of argument leads to the rules of debate, logical processes including fallacies and finally the nature of knowledge and the concept of truth and validity. Accordingly, in the first part of this work it is attempted to gather material pertaining to dialectic and its categories from the pre-*dārśanika* literature and the *Caraka-saṁhitā* and works on *dharmaśāstra* so that the gradual theoretical formulation could be noted. Then the theory of controversy or debate, types of controversy, tricky devices of debate like *chala* (quibble) and *jāti* (sophistical refutation) and the detection of *nigrahasthānas* (grounds of defeat) including fallacies are treated. To complete the picture of the practice and technique of debate, chapters on *mahāvidyā* syllogisms and the component factors and procedure of a debate are included here.

Dialectic has much to do with the logical processes and sources of knowledge (*pramāṇas*). The study of *hetvābhāsas* (fallacies of reason) and other fallacies necessitates a treatment of the *pramāṇas* (sources of valid knowledge) and *tarka* (hypothetical reasoning) which confirms and facilitates the functioning of the *pramāṇas*. Some outstanding principles of dialectical criticism have been brought together and discussed here. Now, there are some sceptics on the one hand and absolutists on the other, who agree in challenging the validity of all knowledge or in contending that the empirical sources of knowledge cannot be said to yield true knowledge. This has been dealt with at length in the chapter on 'Is knowledge possible?' As against this, the *pramāṇavādins* (logicians) have tried to establish theories of truth, so in the next chapter the topics of valid knowledge and the problem of Truth have been taken up for consideration. Dialectic turned

on itself and all concepts and categories of logic were found to be ineffectual and were consequently repudiated by its sweeping attacks. Sceptical thought denies the adequacy of any of the organs of valid knowledge and does not admit the possibility of true knowledge or the understanding of truth. Scepticism cropped up at a very early period in the history of Indian thought and the *pramāṇavādins* consequently had to specifically formulate theories of truth and validity. The final aim and object of dialectic is to discover truth and so some theory of truth is always implicit in such discussions, and this would naturally be in accordance with the views regarding truth hailed by the different *dārśanikas*. In some cases an appeal may even have to be made to the definition of truth by the debaters. So the theories of truth are implicit and sometimes even explicit in all dialectic. The second part of this work can, thus, be said to treat the problem of knowledge which is intimately connected with dialectic.

The third and last part deals with dialectical criticism. Ancient Indian works of almost all branches of knowledge—even the *sūtras* and the *kārikās*—are written in the style of a debate or controversy, that is to say, are dialectical in character. The argument of the opponent is anticipated and answered at every step and the principles of dialectical criticism and even the devices of debate are seen employed in these. *Śāstrārthas* (dialectical expositions) in Indian works reflect the practice of debates and must have also guided and supplied material to debaters in actual debates. Hence a study of the growth of dialectical criticism is essential for a correct apprai-sal of the practice and theory of debate, or of dialectic in general; and to serve as an illustration, dialectical criticism of the problem whether validity of knowledge is intrinsic (*svataḥ*) or extrinsic (*parataḥ*)—as found in Abhayadeva's commentary on *Sanmati-tarka*—is given in an appendix. Moreover, Navya-Nyāya evolved a novel method of bringing in precision in the dialectical examination of problems. So a chapter on the methodology of Navya Nyāya has been inserted after the

chapter on the growth of dialectical criticism. It may be observed that this chapter could very well have been included in Part 1 of this work dealing with the craft of debate, as Navya-Nyāya techniques can serve the purpose of dialectical weapons. But since these are not expressly mentioned as such in texts dealing with debate and since Navya-Nyāya has contributed much to dialectical criticism, this chapter has been included in Part 3 after the chapter on the growth of dialectical thought. Navya-Nyāya evolved a new method of dialectical criticism and thus gave a different turn to the growth of dialectical thought. This is followed by a chapter giving a brief sketch of dialectical criticism in works of other branches of knowledge—*Vyākaraṇa* (Grammar), *Arthaśāstra* (Politics and Economics), *Dharmaśāstra* (Law), *Kāvya-śāstra* (Poetics), etc.—showing the vogue of dialectic and how it was useful in clarifying and developing problems connected with these branches of knowledge (*vidyās*). The following chapter describes some of the actual debates mentioned in Sanskrit literature to show the actual reality of dialectic and its social and political significance. The last chapter briefly reviews the different chapters of the work and tries to form an estimate of the Indian contribution to dialectic.

In the treatment of some topics—especially those pertaining to the 'possibility of knowledge' and the 'problem of truth'—I have adhered almost literally to the original works. In spite of the obvious disadvantages of this method I thought it proper to adopt it in a work on dialectics as it presents a very clear picture of the discussions as they were held in ancient times and of the frame-work of thought in which they were carried on. I have tried to present these topics in the philosophers' own words commenting only where necessary, though I am conscious of the fact that a freer treatment would perhaps have done more justice to such topics as the problem of truth and the like. This would even pave the way, one may hope, for a more comprehensive consideration and treatment of problems of dialectic, logic and epistemology than the consideration of these problems done excluisvely on the strength of western sources or ancient Indian sources.

It may be borne in mind that though in the different chapters the broad division of Brāhmaṇical, Buddhist and Jaina is generally maintained in the treatment of topics, the attempt throughout is to view the whole as one compact picture of debate in ancient India and its intellectual, social and political significance. There have never been such water-tight compartments of life in India as Brāhmaṇical, Buddhist, Jaina, etc. as can be seen from the mutual influence of the schools of thought, the parallel rules and categories of debate, the common ideal of debate and discussion and the like. The different currents of thought have become all the more rich and fruitful by cross-fertilisation. It may be noted in passing that the illustrations given in the ancient texts on logic and dialectic may in some cases seem pointless and meaningless to us at the present day. But they had their justification in the milieu in which they arose and of which they formed an integral part, and have been retained therefore to complete the picture and to give an idea of what problems were uppermost in the minds of the people of those days.

NOTES

1 See also Plato's *Theory of Knowledge—The Theaetetus and the Sophist of Plato,* translated with a running commentary by Francis Macdonald Cornford, pp. 183 ff, 262ff., London Routledge & Kegan Paul Ltd. 1960.

2 *Encyclopaedia Brittanica,* '*Dialectic*'.

3 Compare the Indian concepts of *jalpa* and *vitaṇḍā.*

4 *Encyclopedia Americana,* '*Dialectic*'.

5 I am indebted for this exposition of dialectic to *Dictionary of Philosophy,* '*Dialectic*', edited by Dagobert Runes (Philosophical Library, New York, 1942), and to the articles on '*Dialectic*' in the *Encyclopaedia Britannica* (1950), *The Encyclopedia Americana* (Americana Corporation, New York; Chicago, 1951), *Chamber's Encyclopaedia* (New Edition, 1950, London Georges Newnes Ltd.).

6 See *Encyclopaedia of Religion and Ethics*, '*Controversy*'.

7 See *Dialectic*, pp, 100-101-Mortimer Adler. (London, Kegan Paul ,1927),

8 *Gopatha Brāhmaṇa* 1.1.30-'*savitarkaṁ jñānamayam iti etaiḥ praśnaiḥ prativacanaiś ca yathārthaṁ padam anuvicintya....sarvasmin vākovākye iti brāhmaṇam*' makes it clear that *vākovākya* signified question and answer, or discussion on a controversial point. The *Gopatha Brāhmaṇa* is in both its parts a very late production, yet as Bloomfield says (-*The Atharva Veda and the Gopatha Brāhmaṇa*, p. 102-Encyclopaedia of Indo-Aryan Research); it being very much true to tradition can be safely relied upon in respect of the interpretation of technical terms and the like.

9 This has been described later in the chapter on 'Actual debates'.

See A. B. Dhruva's paper on '*Trividham Anumānam*'—First All India Oriental Conference, Poona, 1919.

11 *History of Indian Philosophy*, Vol. 2, pp. 393 ff—S. N. Dasgupta.

12 *History of Indian Philosophy*, Vol. 2, p. 402—S. N. Dasgupta.

Part I

CHAPTER I

DIALECTIC IN THE PRE-*DĀRŚANIKA* PERIOD

Two peoples have shown, historically speaking, a special propensity for argument. This trait about the Greeks is well known and often pointed out by the historians of Western Philosophy. It will be seen that the Indians of ancient India were a highly argumentative people. Even otherwise, the intellectuals amongst all people do not generally take things for granted, whether it be ordinary things like the possibility of fire existing in water or such metaphysical concepts as those of God, etc. If we throw a cursory glance at ancient books on logic, we find that a major portion of these is devoted to the treatment of methods of controversy and that these books reveal a high standard of debate though the tricks of the trade are not lost sight of and also find due attention paid to them. Right from the early times, the Indians, like all other people, have kept on discussing whether it be about the nature of the gods or the order of the sacrificial ceremonies, or the nature and meaning of word (*śabda*) or the existence or otherwise of the individual soul or rebirth or the Highest Self, or about the ultimate truth.

This spirit of inquiry and truth-seeking and right ordering of things can be detected clearly in many of the hymns of the *Vedas*, most prominently in the hymns of the *Ṛgveda* and the *Atharvaveda*. These assume the forms of riddles, philosophical queries and statements. These can also be easily detected in the discussions on different topics in the *Brāhmaṇas*; and in the dialogues of the *Upaniṣads*, Gārgī keeps on asking one question after another and going deeper and deeper, till Yājñavalkya, perhaps in good humour, warns her that her

head would fall down (*Bṛh. Up.* 3.6.1.). Yāskas *Nirukta* is a work written in the style of discussion. In fact, most of the books on religion and philosophy anticipate the statements and objections of a rival thinker while giving their own exposition.[1] The art of speaking was appreciated in men and women alike in the Vedic times as can be seen from the several statements in the *Vedas* expressing the desire that men and women have the gift to speak well and effectively in assemblies—whatever might have been the kind of assembly that was meant. In the Buddhist *Piṭakas* and the Jaina *Āgamas* we find a number of thinkers, known as *Tīrthikas*, holding opposite or heretical views or doctrines and pitting them against each other in a spirit of honest search after truth and submitting in all humility when convinced of the truth of the opponent's stand. Jealous and dogmatic persons were not wanting even then. Yājñavalkya had a number of such rivals whom he always put to shame. Gośālaka, a friend and companion during the period of spiritual pursuit, and son-in-law Jamālī were such rivals of Mahāvīra; and Ambaṭṭha, a staunch Brāhmaṇa, and Devadatta, Buddha's own brother-in-law and pupil were malicious enemies of Buddha. But generally in an atmosphere of intellectual search and spiritual pursuit under the guidance of great souls like Buddha and Mahāvīra, the spirit of inquiry over-shadowed any such malicious leaning or even the inborn desire to defeat others and rise high in public esteem.

Ordinarily, whenever selfless saints cease to dominate over different congregations and the people at large, the craving for royal patronage to serve as the mainstay of sectarian institutions raises its head, and this leads to debates being regarded as a means to secure royal favour, gifts and a place in courts and influence among the people. The spirit of truth-seeking, in such circumstances, could never be the guiding factor in debates and controversies, though even such debates and controversies have led to the gradual refinement and development of logical and philosophical systems. Fervour of

any kind undoubtedly gives rise to the exercise of higher energies. In Greece, initially, the art of conversation and discussion and intellectual gymnastics secured for a person a high position in social and political circles, and sophists came into prominence as the teachers of eloquence and debating skill. Later on, after Socrates entered the arena, these were utilised for theoretical enquiries and gave a great impetus to the philosophical quest and the formulation of philosophical and such problems.[2] Plato, one of the greatest philosophers of Greece, followed the method of the Sophists.

In India, during the sixth century B.C., such was the vogue of controversies wherein everything was challenged, not excluding the results of the fundamental values of life—good and evil, *puṇya* and *pāpa*[3]—that it appeared that intellectual gymnastics would become the order of the day and there seemed to be an overgrowth of philosophical thought and criticism, perhaps at the cost of a balanced practical life. Buddha, and to some extent even Mahāvīra and the author of the *Bhagavad Gītā*, under the circumstances, deemed it fit to cry halt to this intellectual game or sophistry and appealed to the thinkers to imbibe, understand and practice the fundamental truths. Under the impact of this line of thought of Buddha, *vāda* or *kathā* (controversy, debate) came to be banned in Buddhist circles as leading unnecessarily to bitterness, jealousy, unhealthy competition and rivalry.[4] Still, in actual life, dialectical devices and tricks of debate had their own attraction even for the Buddhists. "The opening debate of *Kathāvatthu* on the reality of the soul is conducted with so high a degree of artificiality and every kind of dialectical devices that it suggests the probable existence of special manuals in which the art of debate was taught.[5] The *Upāyahṛdaya* of the *dārśanika* period, starts with a plea in favour of the utility of *vāda* or discussion as leading to the discipline of the intellect and to the determination of truth and refutes the orthodox view of the old Buddhists by whom *vāda* was viewed with contempt.[6] The Jaina

monks, preachers of austerity and non-injury as they were, did not give specific importance to mere dialectical skill as such, though even they have not been indifferent to the art of dialectics and have even formulated rules pertaining to it.

The art of debating seems to have received a forceful impetus in Vedic circles though the traditions recorded in the Buddhist and the Jaina works with regard to it are equally valuable and enlightening. The Vedic school or tradition was more active than the Buddhist or the Jaina, hence the art of debate was undeniably popular in Vedic circles. A major part of the *Nyāya-sūtra*, the fundamental treatise of the Nyāya school, is devoted to rules for conducting a debate, besides giving a critique of knowledge and an exposition of inference and syllogism. "The bona-fide and male-fide arguments are described, the cavilling, the futile answers, logical fallacies and finally all the cases are mentioned where the debater must be pronounced by the umpire to have lost the contest. It is only in the reformed new brāhmaṇical logic, the logic which emerged from the struggle with Buddhism, that this part is dropped altogether and the theory of syllogism begins to play the central part."[7] The *Caraka-saṁhitā*, a work on Indian medicine, also gives an exposition of the modes of controversy and it is interesting to note that its treatment is different and even more illuminating,—being connected with the problems of practical life—than that of the *Nyāya* texts proper.

Before we come to a systematic treatment of debate (*kathā*), etc, according to the *Nyāya-sūtra* and later literature, we may examine if any traces of dialectic and the rules pertaining to debates are recorded in the earlier literature, even other than philosophical.[8] *Manana* (cogitation) of the famous trio—*śravaṇa* (hearing, comprehension), *manana, nididhyāsana* (contemplation)—corresponds to reasoning or *anumāna*.[9] *Tarka* (reasoning) is mentioned in *Kaṭha-Upaniṣad* 2.9 and *Mahābhārata* 2.11.26, *Manu-Smṛti*, 12.106, and other *Smṛtis*. Vāda (discussion) is mentioned in *Manu Smṛti* 6.50; *Rāmāyaṇa* 1.13.23, 7.53.15; *yukti* (continued reasoning) in

Aitareya Brāhmaṇa 6.23, *Rāmāyaṇa* 2.1.13; *jalpa* (disputation) in *Mahābhārata* 13.90.45, *vitaṇḍā* (wrangling) in *Mahābhārata* 2.33.4; 7.61.13; *nirṇaya* (ascertainment, decision) in *Mahābhārata* 13.147.2,4 The *pramāṇas*, sources of knowledge, are referred to in a number of works. The *Taittirīya Āraṇyaka 1.2.* mentions *smṛti*, *pratyakṣa*, *aitihya* (testimony) and *anumāna.*

Ānvīkṣikī (the science of intellectual discipline or logical reasoning) is recommended in all *Smṛti* works, *Mahābhārata*, *Artha-śāstra*, and other works, of course if not carried to an extreme and not found to be nipping faith (śraddhā) and intuitive experience in the bud.[10] In the socio-religious Institutes of Manu, and others we find that the Council or Assembly consisted generally of three, five or less than ten Brāhmaṇas, who were learned in the *Vedas*, the *Vedāṅgas*, Logic, and the like and could give decisions in matters on which the people might seek their advice.[11] The debates or dialogues such as those described in the *Upaniṣads* (*Chāndogya*, *Bṛhadāraṇyaka*, etc.) were in all probability the precursors of the *Hetu-vidyā* (science of reasoning) inasmuch as even in such debates, faults in reasoning must have been felt and detected, and in trying to explain these, the *hetvābhāsas* and conditions of valid reasoning gradually came to be formulated. The words which had to be used in special senses to carry on debates in assemblies, perhaps, came to constitute the technical terms of *Ānvīkṣikī.*

We find recorded in the *Brāhmaṇas* differences of opinion among the different religious schools as regards the interpretation of sacrificial rites, as also doubts raised and resolved as regards the performance of religious ceremonies (see *Śatapatha Brāhmaṇa* 4.2.9; 3.4.43 ff, *Aitareya Brāhmaṇa* 7.2.10). In the *Aitareya Brāhmaṇa* 7.4.26, there is mentioned a difference of opinion as to whether a Kṣatriya should eat or not the portion of the sacrificial food which is to be eaten by the sacrificer. We find recorded here different positions in respect of the same point and also that there is some justi-

fication given here for a particular stand and condemnation of a different position. Further, the difficulty is posed that if the Kṣatriya partakes of the sacrificial food, he becomes a sinner and if he does not eat the sacrificial food, he cuts himself off from the sacrifice (Compare the *tarka, ubhayataḥ-spāśā rajjuḥ*); and a solution is found so that both the aspects of the difficulty are averted. The *Bṛhadāraṇyaka Upaniṣad* (third chapter) describes an episode at the court of King Janaka. Janaka performed a sacrifice and many Brāhmaṇas assembled on the occasion. Janaka wished to know which of these Brāhmaṇas was the most learned in the scriptures. He offered a gift of a thousand cows, to the horns of each of which were fastened ten coins of gold. Yājñavalkya asked his pupil to drive away the cows. At this the Brāhmaṇas were enraged and put questions which Yājñavalkya, to their embarassment, answered. Among them was Gārgī, a lady philosopher. She said, " Venerable Brāhmaṇas, I shall ask him two questions. If he answers these, none of you can defeat him in argument" (3 8.1). The second question, ' Across what is space woven like warp and woof ? ' was an embarassing one. If Yājñavalkya were not to explain it because he thought it indeterminable, he would expose himself to the charge of non-comprehension (*apratipatti* – i.e. the *nigrahasthāna apratibhā* of the *Nyāya-sūtra*); if on the other hand, he attempted to explain what is inexplicable, he would be guilty of misapprehension (*vipratipatti*) or contradiction. Yājñavalkya explains that this ultimate reality is inexplicable, indescribable, beyond speech and thought, undifferentiated (3.8.9–11). We find the seeds of ' grounds of defeat ' (*nigrahasthānas*) in such passages.

In the *Mahābhārata* (*Śāntiparva*, 308), there is an episode wherein it is related that a female ascetic Sulabhā inquired of the philosopher-king Janaka wherein lay the secret of the final release of the soul. Janaka suspecting her to be a spy asked in a taunting manner what business a lady, whose strength lay solely in the glamour of youth and beauty, could have with the doctrine of emancipation. Though accosted

in this unchivalrous manner and even in ill-applied terms, Sulabhā was unperturbed and maintained her composure. In the course of her reply she made the following observations on the canons of good or sound speech : A speech properly so called should be subtle, discriminative and orderly. It should lead to decision and have a purpose in view. A statement is said to be subtle (*sūkṣma*) when it deals separately with the different topics under discussion and ultimately leads to a conclusion regarding these. Discrimination (*saṁkhyā*) in speech signifies judging clearly the relative merits and demerits of a thing. A speech can be said to be orderly (-having *krama*) when it treats its subjects in the proper order. A speech should enunciate a particular topic such as *dharma, artha, kāma, mokṣa*; and it can be said to be conclusive (-*vinirṇaya*) if after enunciating this, it at the end specifically points it out. A speech can be said to have a purpose (*prayojana*) when it enthuses one to aquire what is desirable and avoid what is undesirable and thus leads to his well-being. *Saukṣmya, saṁkhyā, krama, nirṇaya* and *prayojana* are the requisites of a good speech. Further, a speech should be full of sense (*upetārtha*) (i.e. there should be no inconsistency of expression or sense), concentrated on one point (*abhinnārtha*), free from digression (*nāpavṛttam*), not pleonastic (*na adhikam*); it should be smooth or polished (*ślakṣṇa*), unequivocal (*na saṁdigdha*), not bombastic, not displeasing, not untruthful (i.e. not giving wrong or unauthoritative information), not harmful or misguiding; it should be refined (*saṁskṛta*), not laconic, not abstruse (not containing hard and obscure words), not unsystematic (i.e. maintaining the proper order of expression); it should leave nothing understood, should not be figurative, should not be lacking in the statement of reason or justification (or should not be inopportune), and should not be devoid of an object. A speech to be free from the faults of judgment should not be prompted by lust, wrath, fear, greediness, abjectness, crookedness, abashment, tenderness or conceit. A speech is said to be lucid if there is agreement

between it on the one hand and the speaker and the hearer on the other. A speech, which though clear to the speaker himself is uttered without any regard for the hearer, creates no impression on the latter. That speech, again, which has no regard for the audience, whether it be relevant or irrelevant, fails to convince the audience. That speech, which leaving aside the matter in hand speaks of something else, is faulty; it creates misunderstanding and is inopportune inasmuch as it speaks of commerce, etc. to one who is interested not in it but in renunciation and so on. He alone is a speaker who employs expressions which while conveying his own meaning, are also rightly understood by the audience. Sulabhā says her speech would be full of sense and rich in merits and requests the king to give a patient hearing.

It will be seen that many of these requirements of a good speech have their parallels in the ideas behind the *nigrahasthānas* (grounds of defeat or censure) enumerated in the *Nyāya-sūtra* and other works.

We have also the story of Aṣṭāvakra, a powerful debater who defeated one Vandin at the court of King Janaka (*Āraṇyaka Parva*, 132–134). The dialogue between the two abounds in riddles and is a display of ready wit and an acquaintance with many branches of learning. In the *Sabhāparva*, Nārada is said to be an expert in *Nyāya*, capable of deciding questions through evidences *(pramāṇas)* and clever in ascertaining the merits or otherwise of a statement of five parts or members *(avayava)*. The statement of five *avayavas* refers undoubtedly to the syllogism having five *avayavas*.[12] Now, no work on the *Nyāya-śāstra* written by Nārada has come down to us. But Jayanta, in his *Nyāya-Mañjarī* quotes a verse attributed to him which gives an exposition of the *nigrahasthāna* (ground of censure or defeat) called *pratijñā-hāni* (abandonment of a proposition).[13]

In the *Ādiparva*, the hermitage of Kāśyapa is described as resounding with the voices of sages who knew the true

meaning of *sthāpanā* (the establishment of a proposition), *ākṣepa* (objection), and *siddhānta* (conclusion).[14] It may be noted that these are technical terms of logic used in the *Caraka-saṁhitā* and other works. Similarly, in the *Āśvamedhika-parva*, 87, we are told that the sacrificial ground of Yudhiṣṭhira was crowded with logicians who employed arguments and counter-arguments to defeat one another.[15] All this indicates that logic and dialectic were in the air, and one may even presume that there were works on the subject, even earlier than the *Nyāya-sūtra*. The treatment of debate in the *Nyāya-sūtra* is quite a detailed one and the author refers to different views on some topics (e.g. *chala*). This confirms the existence of earlier traditions and even works on dialectic. The evidence of the *Sthānāṅga* and other *sūtras*, the *Caraka-saṁhitā*, the *Upāyahṛdaya* and other early works shows that their tradition regarding rules and devices of debate was perhaps different from that which we find recorded in the *Nyāya-sūtra*.

We find quite an advanced state of dialectical criticism reflected in the discussions in Patañjali's *Mahābhāṣya* (2nd century B.C.). We have in it the mention of *anaikāntika* (in-conclusive) (1.2.30; 6.1.37; 7.2.102; 8.3.34), *itaretarāśraya* (mutual dependence) (6.3.109); *anyonya-saṁśraya* (same as *itaretarāśraya*) (4.1.3), *cakraka* (argument in a circle) (1,3.60; 6.1.135): *anavasthā* (infinite series) (2.1.1); '*atiprasaṅga* (over-application) (1.1.9; 3.1.3; 3.3.19; 6.1,66—' *atiprasaṅgo vraścādiṣu* '—*Vārttika*); *lāghava* (parsimony) (6.1.65); *ubhayataḥspāśā rajju* (dilemma) (6.1.68), *utsarga* (general rule) and *apavāda* (exception) (1.1.54; 3.1.94); *parihāra* (removal of a difficulty or answering an objection) (4.1.7), and so on. The *Nirukta* and the *Mahābhāṣya*, especially the latter, even like the later *bhāṣyas* anticipate objections and answer them. Thus, as said before, even before the *Nyāya-sūtra*, dialectic was much in vogue and there is every likelihood of there being early works on the subject. But the *Nyāya-sūtra* overshadowed other works that might have existed before it by its systematic formulation and treatment of dialectical and philosophical topics and problems.

Coming to early Buddhist literature, the *Piṭakas* (5th–4th cent. B.C.) are packed with accounts of controversies between Buddha and his disciples or these and rival thinkers or heretics, *tīrthikas*, as they are called, though *vāda* was at a discount and Buddha himself did not like to encourage fruitless intellectual gymnastics. In the *Nandakovāda sutta* of the *Majjhima Nikāya*, we find that Nandaka gives instructions to the nuns by a sort of Socratic dialogue which is termed *paṭipucchā-kathā*) (—*prati-pṛcchā-kathā*). This method of giving instruction by asking questions seems to have been very popular with Buddha and his disciples. We have one *Anumāna sutta* in the *Majjhima Nikāya*, which presupposes the use of the word '*anumāna*' in the sense of inference. The term *vāda* also occurs in the *Upāli-sutta* in the same *Nikāya* in the sense of discussion or controversy (—*vādaṃ āropehi).* (See also *Mahāsukuludāyi sutta*). Buddha had from the very beginning made a condition with Upāli that he could discuss with him only if he 'stationed himself in truth'. This is an essential condition in a sincere controversy or *vāda*. We are told in the *Assalāyana sutta (Majjhima Nikāya)* that Āśvalāyana had from the very beginning hesitated to enter into a controversy with Buddha, for Buddha was a *Dharmavādin* (teacher of the Law or Religion) and a *Dharmavādin* is very clever and unanswerable at discussions (*Gotamo dhammavādī, dhammavādino ca pana duppaṭimantiyā bhavanti).* In the *Vāseṭṭha-sutta*, Vāseṭṭha and Bhāradvāja are said to be well versed in *jappa (jalpa* i.e. science and art of discourse and debate) among other lores. In the *Cūlasaccaka sutta* of the *Majjhima Nikāya*, we are told that Buddha asked Saccaka the question 'Do you have full control over *rūpa*, so that you could have it as you like or not have it as you like ?" Saccaka kept quiet. He was questioned again and still he did not answer. Buddha then said, "This is not the time to keep quiet. If on being questioned by the Tathāgata thrice on a point of *dharma* one does not answer, his head is split immediately into seven pieces. (Compare the *nigraha-*

sthāna ajñana or *apratibhā*). Exactly at this moment a Yakṣa with a blazing *vajra* was seen hovering about. Buddha put the same question a third time and Saccaka answered 'No!' Buddha gave him a chance twice to speak after great thought as that reply of his contradicted his previous one (Compare the *nigrahasthāna pratijñāhāni*). Saccaka had had similar discussions with Makkhali Gosāla and others, who digressed and did not keep to the point and lost their temper, whereas Buddha retained his composure even when tauntingly addressed by Saccaka (*Majjhima Nikāya, Mahāsaccaka sutta*). Such debates must have given rise to the rules and set procedure of a debate. Many of the rules of debate can be traced back to the accounts of debates and controversies in the pre-*dārśanika* literature. In the *Udāna* which is included in the *Khuddaka Nikāya* of the *Sutta piṭaka* we are told that as long as the perfect Buddhas do not appear, the *takkikas* (*tārkikas* or sophists) are not corrected, nor are the *Sāvakas*; owing to their wrong or misguided views they are not released from misery.[16]

The *Aṅguttara Nikāya* is more interesting and important from our point of view. There is in it an exposition of four kinds of questions or problems—(*a*) *eka-saṁbyākaraṇīya*, to which a direct and final explanation can be given, (*b*) *vibhajja-byākaraṇīya*—which can be answered by going into details, or one that must receive a qualified reply, (*c*) *paṭipucchā-byākaraṇīya*, which can be answered by asking another question, (*d*) *ṭhapanīya*, which must be set aside, must not be answered. He alone is a wise *paṇḍita* who can discriminate and who takes what is good and rejects what is not good; such a man, who knows how to handle such problems, is difficult to overcome.[17] The *Milindapañha* also describes these four kinds of questions and illustrates them : (*a*) 'Is form (*rūpa*) impermanent?' 'Is sensation (*vedanā*) impermanent?'..are questions to which a direct and final answer can be given. (*b*) 'Is that which is impermanent form (*rūpa*)?' is a question which can be answered by analysing and going into details. To this a

qualified answer has to be given, 'Not merely form, but sensation *(vedanā)* is impermanent, *saṁjñā* (idea) is impermanent, and so on'. (c) 'What, then, can the eye perceive all things?' is a question that can be answered by asking another. Or, if a person is asked 'What is the eye?' he should first retort, 'Why do you ask?' and when the other says, 'I ask with reference to impermanence, he should reply, 'Yes'. (d) 'Is the universe everlasting? Is it not everlasting? Has it an end? Has it no end? Is it both endless and unending? Is it neither the one nor the other? Are the soul and body one? Is the soul distinct from the body? Does a Tathāgata exist after death? Does he not exist after death? Does he both exist and not exist after death? Does he neither exist nor not exist after death?'—These are questions that ought to be put aside. Buddha pronounced such questions or problems *avyākṛta*, those that cannot be expounded. There is no reason for, or purpose served by, answering them; and the Buddha does not lift up his eye without a reason or without purpose in a view.[18]

The *Aṅguttara Nikāya* (4.14.9) also speaks of four kinds of preachers of righteousness (*dhammakathika*) : (*a*) Those who speak briefly and without adhering to the text, or unconnectedly, the assembly being ignorant of what could be said to be adhering to the text (or connected) or otherwise; *(b)* those who speak briefly but connectedly, the assembly being one which is proficient in judging what is connected and what is unconnected; (*c*) those who speak at length or unconnectedly, the assembly being ignorant of what is connected or otherwise, (*d*) those who speak at length, the assembly being proficient in judging what is connected and what is otherwise. Similarly, the *Aṅguttara Nikāya* 4.14.10 describes four kinds of *vādins* (preachers or dialecticians) : (*a*) who dilate on a point according to the meaning or sense (*atthato*) of the scriptural texts and not according to the letter (*byañjanato*), (*b*) who expound according to the letter, and not according to the sense, (*c*) who expound according to the sense as also according to the letter, and (*d*) who explain neither according to the sense nor according

to the letter. What is essential is that one should explain a point—whether according to the meaning or to the letter—with proper analysis and discrimination by the four modes of analysis or perfect understanding (viz. *attha-paṭisambhidā*, analysis of the meaning or the thing signified; *dhamma-paṭisambhidā*, analysis of the text or the doctrines of Buddha or of causal relations; *nirutti-paṭisambhidā*, analysis of definitions or of connotation; *paṭibhāna-paṭisambhidā*, analytic insight into the preceding three, viz. *artha*, *dharma*, *nirukti*, or analysis of the intellect to which things knowable by the foregoing processes are presented).[19]

According to the *Aṅguttara Nikāya*, 5.16.7, speaking to one who has no faith about faith, to one who is lacking in good conduct about good conduct, to a person, who is not learned, about profound learning, to a niggardly person about charity and sacrifice, and to a foolish person about wisdom are examples of *dukkathā* (wrong or inopportune conversation). *[20] It is obvious that all these mostly refer to instruction or preaching to an individual or a group; but these passages have in view the two parties to a conversation or debate; and the exposition of the method may as well apply to a debate on any subject- In a debate also, the debaters are expected to speak to the point, briefly or at length as decided before, to cite authority in support, and in a manner which is opportune at the moment; there is no sense in debating with a person who is very dogmatic in his views and does not even try to understand or appreciate your standpoint.

The Buddhist monks, it is well known, kept on discussing and disputing about the exact teaching of Buddha and its correct interpretation. This gave rise to feuds and schisms but also led to the development of Buddhist thought.[21] The monks were many a time found talking and discussing about politics, war, food and drinks, clothing, flowers, garlands, etc.

* Speaking to the faithful about faith and so on are examples of sukathā (good conversation).

Hence, topics for conversation and discussion (*kathāvatthu*) had to be prescribed so that they would not waste their time and energy in useless discussions.[22]

The *Kathāvatthu*, a work of the *Abhidhamma Piṭaka* composed by Mogaliputta Tissa at the Buddhist Council (about 255 B.C.) mentions *anuyoga* (inquiry), *udāharaṇa* (illustration), *paṭiññā* (proposition), *upanayana* (application of reason), *niggama* (conclusion), *niggaha* (defeat)—all technical terms of dialectic. The mention of these technical terms vindicates our supposition that some sort of understanding of logic and dialectic existed at even that time. It is said that Tissa in order to avert all bases of heresy that had arisen and that might in the future arise, analysed in detail the topics of discourse by the method delivered by Buddha. The salient feature of *Kathāvatthu*, '*Points of Controversy or Debate*', is the crushing of all dissentient views. In order that the intent of these controversies could be grasped easily, the *Aṭṭhakathā* commentary classifies them thus—question of a *Sakavādin* (*Theravādin*) and the corresponding answer of a *Paravādin* (opponent), and then the question of a *Paravādin* and the answer of a *Sakavādin* to it. The controversy regarding the soul between the *Theravādin* (Buddhist disputant who does not admit the reality of the soul-entity) and a *Puggalavādin* (a heretic opponent who asserts its reality) is a very good instance of the methods of reasoning prevalent at that time. The case is examined in different ways by giving the arguments of the *vādin* and the balancing ones of the *prativādin* or vice versa in eight *niggahas* (defeats). The case is also put and presented differently by simple comparison, analogy and the like. We cannot do better than quote here S. Z Aung's remarks on the logical method of the dialectic in the *Kathāvatthu* :

> "I think the best way is to present the logic of the *Kathāvatthu* by a symbolical representation, e.g. in I.1.§1 :
>
> Adherent – Is A B? (*ṭhapanā*)
> Opponent – Yes.

Adh. – Is C D (*pāpanā*)?

Opp. – No.

Adh. – But if A be B, then (you should have said) C is D. That B can be affirmed of A but not D of C is false. Hence your first answer is refuted. (*ropanā*)

Or according to European logic :

If A is B, then C is D. (But C is not D.)
Therefore A is not B.

In this conditional argument, the minor premiss (bracketed) is suppressed.

The **antecedent** of the hypothetical major premiss is termed *ṭhapanā*, because the opponent's proposition, A is B, is conditionally 'established' for the purpose of refutation. The **consequent** of the hypothetical major premiss is termed *pāpanā*, because it is 'gotten' from the antecedent. And the **conclusion** is termed *ropanā* because the refutation is placed on the opponent. (The three Pāli words mean 'posting', 'gaining', 'lifting'). Next :

(2) If D be denied of C,

then B should have been denied of A.

(But you **affirmed** B of A.)

(Therefore) that B can be affirmed of A, but not D of C, is wrong. Or, according to European logic :

If C is not D, then A is not B.

(But A is B). Therefore C is D.

This is the *Paṭiloma*, inverse or indirect method, as contrasted with the former or direct method, *Anuloma*. In both methods the consequent is denied. But if we reverse the hypothetic major in the latter method we get—

If A is B, C is D.

But A is B.

Therefore C is D.

By this indirect method the opponent's second answer is re-established.

Next,

(§3) Opponent — If A is not B, then C is not D. But you said A is not B, but C is D. But if B can be denied of A, D should be denied of C.

Again,

(§4) Opp.—Is this bad refutation? Compare it with yours (§1). There we affirmed B of A. You claimed to refute us. But we were ill refuted, for see our reply in §2.

(§5) Not that way are we to be refuted. You, dear sir* refuted badly, we refuted you well (in §3). Hence our conclusion is sound.

These five sections (§§) constitute the First Refutation in *Anuloma-Paccanīka-pakkha*. The next five constitute the Second Refutation in *Paccanīkānuloma-pakkha*. Thus there are two Refutations under each of the four following aspects of this question of the person or soul:

(1) Taken by itself, absolutely, (2) Taken with reference to space, (3) Taken with reference to time, (4) Taken with reference to things. Hence we get the so-called 'eight-faced view' (*aṭṭha-mukha-vāda*)."[23]

This method can be developed in respect of each one of the *kathās*. Here we see one of the attempts made to schematise discussion, and this was very necessary in view of the habit of organised public debate which prevailed in early India. Gradually the line of argument was attempted to be separated from the irrelevancies in which the early methodology obscured it, and plainly set forth in a formulation of the syllogism. There must have been a period of experimentation before the logical method was achieved. The *Kathāvatthu* is a work representative of this period. It is worth while to note that the number of phases in a *niggaha* of the *Kathāvatthu* corres-

* The courteous mode of address on both sides and the absence of any polemical austerities, is a pleasant feature in the dialogue. The opponent, moreover, is sometimes allowed to have the last word.

ponds to the number of members in the syllogism of the Nyāya-school; and the *upanayana* and *niggama* phases in the *niggaha* are the fourth and the fifth phases, just as the *upanaya* and *nigamana* are the fourth and the fifth members of the syllogism.

In the *Milinda Pañha* (first century B.C.) we are told that Milinda was versed in logic besides the *Vedas, Sāṁkhya, Yoga, Vaiśeṣika*, etc. As a disputant (*vitaṇḍavādin*) he was hard to equal, harder still to conquer; he was superior in all respects to the founders of the various schools of thought.[24] Milinda was fond of discussions with *lokāyatas* (casuists engaging in discussions on absurd points) and *vitaṇḍas* (sophists or disputants).[25] He was in search of someone—whoever he be—who would be able to discuss with him and resolve his doubts. He was directed to the sophists Pūraṇa Kassapa, Makkhali Gosāla, Nigaṇṭha Nātaputta, Sañjaya Belaṭṭhaputta, Ajita Kesakambalī, and Pakudha Kaccāyana.[26] Ultimately he finds a good companion in discourse in Nāgasena.

The following dialogue between Milinda and Nāgasena gives us some idea of what was thought to be the proper spirit in which debates and discussions ought to be carried on.[27]

Milinda - Reverend Sir, will you discuss with me again?

Nāgasena - If your Majesty will discuss as a scholar (paṇḍita), well; but if you will discuss as a king, no.

M - How is it then that scholars discuss?

N - When scholars talk a matter over with another, then is there a winding up, an unravelling, one or the other is convicted of error, and he then acknowledges his mistake, distinctions are drawn and contra-distinctions; and yet thereby they are not angered. Thus do scholars, O king, discuss.

M - And how do kings discuss?

N - When a king, Your Majesty, discusses a matter and he advances a point, if any one differ from him on that point, he is apt to fine him saying, "Inflict such a punishment upon that fellow." Thus, Your Majesty, do kings discuss.

M. – Very well. It is as a scholar, not as a king, that I will discuss. Let Your Reverence talk unrestrainedly, as you would with a brother or a novice, or a lay disciple, or even with a servant. Be not afraid."[28]

Milinda, trying to test Nāgasena's worth, questions and cross-questions him again and again, and then when his over-skill is proved foolishness, becomes his disciple. All night he ponders over the scriptures and therein finds problems hard to solve and full of snares. He thinks to himself, "Buddha's teachings are manifold; some are explanatory, others spoken according as the occasion required; some deal fully with essential points. After some time due to ignorance of what each time was meant there will be strife as to what Buddha has laid down in these diverse and subtle utterances. So let me now put to Nāgasena questions which seem so strange and hard and even contradictory, so that when people begin to doubt, the light of his solutions would guide them along the path of truth."[29]

These questions are called *meṇḍakapañha,* questions that put you on the horns of a dilemma. If you say 'Yes', one absurdity follows; if 'No', another absurdity follows. The metaphor is taken from the fighting of rams. One such *meṇḍakapañha* put to Nāgasena pertains to honours paid to Buddha. The heretics say that if Buddha accepts gifts he cannot have passed entirely away. He must be still in union with the world, sharing in the things of the world, and so any honour paid to him would be empty and in vain. On the other hand, if he has entirely passed away from life, escaped from all existence and is unattached to the world, then honours would not be offered to him. For he who is entirely set free accepts no honours and any act done to him who accepts it not becomes empty and vain. This is a dilemma which has two horns. It is not a matter within the scope of those who are unintelligent; it is a question fit for the great. Milinda asks Nāgasena to tear asunder this net of heresy, to put on one side, so that the future Buddhists may see through the confusion of their adversaries.[30]

Other such *meṇḍakapañhas* are: (a) Was Buddha omniscient, if his omniscience was dependent on reflection? Only if he reflected he knew whatever he wanted to know, so he could not be called omniscient (*Milinda-pañha* 4.1.20–28). (b) Why was Devadatta admitted to the Order when Buddha knew that he would create a schism and suffer torment in purgatory for a *kalpa,* when Buddha is known to be kind? It would be like first wounding a man and then pouring oil on the wound, first throwing a man down a precipice and then reaching out to him a helping hand, first killing him and then seeking to give him life, first giving pain and then adding a subsequent joy to the pain given (Ibid, 4.29–33). (c) Heretics say, "Your people (i.e. Buddhists) say that King Sivi gave his eyes to the man who begged them of him, and when he had thus become blind new divine eyes were given to him. This statement is unpalatable, it lays the speaker open to rebuke, it is faulty. For it is said in the *Sutta* : 'When there is no longer any cause, any basis left, then the divine eye cannot arise'. So if he gave his eyes away the statement that he received new eyes must be false; and if divine eyes arose to him, the statement that he gave his eyes away must be false." (Ibid, IV. 1.40–46). A number of such dilemmas are put forth in the fourth book *Meṇḍaka-pañha* of *Milinda-pañha.*

The fifth book of *Milinda-pañha* is termed *Anumāna-pañha* (the problem of Inference). Buddha is no longer living; neither Nāgasena nor his teacher had seen him. Can this mean that Buddha did not exist? Now people have not seen the Kṣatriyas of old who were the founders of the line of kings. But as their existence once upon a time can be known from the royal insignia, crown, etc. which they used and which are still to be seen, so the existence of Buddha can be known from the royal insignia used by him—the four means of keeping oneself ready and mindful (*sati-paṭṭhāna*)...the seven forms of the wisdom of the Arhats and the noble eight-fold Path. By this reason, on this ground, by this argument, through this inference can it be known that the Buddha

lived.[31] A number of such inferences proving the existence of Buddha are put forth in this book. For instance, (*i*) As when men see a pleasant city well planned out, they know by inference how great the founder was, so when they see our Lord's city of Righteousness (*dhammapura*), they know by inference that he did once exist. (*ii*) As men seeing the waves can judge by inference the great extent and power of the world-embracing sea, so may they judge the Buddha when they see the greatness and force of the waves of righteousness. (*iii*) Seeing the earth smiling, well-watered, green with grass, men say that a great and pleasant rain has fallen; so when they see this multitude rejoicing, peaceful, men may infer how sweet the rain in the form of Buddha was that delighted their hearts; and so on. (See Ibid.5.35). These are the inferences from effect to cause, or pertaining to a past entity —the *śeṣavat* of the *Nyāya-sūtra*.

The book *Opammakathā* of *Milindapañha* gives an exposition of what qualities a member of the Buddhist order must have in order to realise Arhatship. The qualities are described by comparison; as for example, he must have one quality of the ass, and five of the cock, and one of the squirrel and so on.

Thus we can conclude on the basis of the Buddhist Canonical literature and other early Buddhist works that some traditions of logic and dialectic were prevalent even in those days and proficiency in logic and dialectic besides other sciences and arts was thought much of. The discussion as regards the four kinds of questions and the method of discourse and the like are evidences to support this.

The *Lalitavistara*, a Mahāyāna Sanskrit work of the first or second century A.D., describes a Bodhisattva as expert in a number of arts and sciences, *hetuvidyā* (logic, science of reasoning) being mentioned among them.[32] The *Laṅkāvatāra sūtra* mentions in Chapter 2, Naiyāyikas. Mahāmati asks Buddha, "Say, how in time to come Naiyāyikas will flourish ?

How is tarka (reasoning) corrected and how is it carried on? What is the nature of the doctrine that draws a conclusion from the reason and the example?" In Chapter 10, we read, "Whatever is produced is destructible-this is the conclusion of the *Tārkikas.*" (See *History of Indian Logic*, p. 244—Vidyābhūṣaṇa). Yet we do not find in these works any systematic formulation of the rules and principles of dialectic; this was left to later philosophers like Maitreya and Asaṅga and Vasubandhu, and most prominently Diṅnāga who gave a truly Buddhist stamp to the logic prevalent at the time. Controversies and debates were very popular in Buddhist circles in order to defeat and convert a rival thinker or for the purpose of discussing the possible interpretations of Buddha's teachings and their significance. Moreover the Order of monks had its rules for the trial and punishment of the *bhikṣus* who had violated the rules of the *Saṅgha.* These rules are very much akin to the rules and procedure of a debate, as can be seen from the *Cullavagga* and the *Parivāra.* The *Kathāvatthu* gives us a clear idea of the laborious method of discourse, which is representative of the period of experimentation meant to arrive at a clear cut logic and dialectic.

The Jaina current of thought too, like the Buddhist, in the initial stages, attached greater importance to moral conduct and faith than to intellectual controversies and disputations. Yet, even Mahāvīra had to enter into discourses and controversies with his disciples and even with the rival thinkers of his time. As said before his era was the era of interrogation and controversy. The Jaina canonical literature (6th–5th cent. B.C.) is full of accounts of such controversies and discussions.[33] To mention a few instances, we have an interesting account of the controversy between Mahāvīra and Saddālaputta, a follower of Gośālaka concerning *Niyativāda* (doctrine of Destiny) in the *Upāsakadaśāṅga*, 7, and on the same subject between Kuṇḍakolika and a god in the *Upāsaka-*

daśāṅga, 6. The *Rājapraśnīya Sūtra* records a discussion between Keśī Śramaṇa, a follower of Pārśva, and King Paesi as to whether the soul and the body are one or distinct entities. We have a similar controversy in the Pasenadi Sutta of the Buddhist *Dīgha Nikāya*. There is a description in the *Sūtrakṛtāṅga* 2.6 of the discussions which Ārya Ārdraka had with a number of thinkers on different topics. In the *Sūtrakṛtāṅga* 2.7, there is described a discussion between Gautama and Udaka, a follower of Pārśva. Udaka raises a question whether at some future time all moveable things in the world might not die out being born as immoveable things and none but immoveable things exist, and vice versa. In the latter case, a layman who abstains from killing animals practically does no injury whatsoever; in the former case, he could not transgress even if he were to do injury (2.7.12). Here he sets forth an odd position that would follow if either of two alternative views is accepted. Gautama combats this at length with the result that Udaka is converted from the creed which enjoins four vows to that which enjoins five great vows and the *pratikramaṇa* (expiation of sin) (2.7.39–40).

The *Bhagavatī Sūtra* is full of accounts of controversies between Mahāvīra and rival thinkers on numerous topics such as the nature, size and number of souls, karma and the like. The controversy, between Keśī Śramaṇa, and Gautama, the chief disciple of Mahāvīra, on *ācāra* or the code of behaviour, as related in the *Uttarādhyayana*, is well known. There are numerous such controversies, described in the Jaina Canon, from which the rules of debate and principles of logic emerged. The known dialectical norm in its turn determined the form of these debates.

It is evident from this that the Jainas even initially were not indifferent to, or prejudiced against, the art of debate and controversy. On the contrary, it was a practice with them to make a special mention of *vādins* (dialecticians) among the followers and disciples of the

Tīrthaṅkaras.[34] Mahāvīra had as many as four hundred *vādins* among his followers : Those versed in the art of debate are among the nine kinds of proficient persons mentioned in the *Sthānāṅga Sūtra*, 679.[35] Even the rigid and severe rules of the code of conduct laid down for the Jaina monks were relaxed in the case of such monks as were *vādins* in view of the audience they had to face and for the benefit of the Jaina faith. Such a monk was advised to go clean and neatly dressed to debating assemblies in order to create a good impression. He was also allowed to eat such food as would sharpen his intellect. After the occasion he had to undergo a minor *prāyaścitta*.[36] All facilities were given to a monk who showed some aptitude for the art of debate. He was even allowed to to go to teachers of a rival school to study carefully the different currents of philosophical thought so that he could pointedly refute the views of rival thinkers, or if he found that he could be better trained there,—sometimes even against the will of his own teacher.[37] They were, even against the rule for Jaina *sādhus*, advised to go to assemblies attended by men in great numbers and even kings, to ward off any danger from rival thinkers and to defeat them in debates as also to make the Jaina religion appeal to the hearts of the people at large. At times, it seems, such a *sādhu*-cum-*vādin* felt that he had had too much of this business and that he could not devote enough time to his own spiritual pursuit, and he even left his own group, against the will of all concerned, to go to some quiet place.[38] It would not, therefore, be surprising if we find some topics connected with dialectic in the Jaina Āgamas. Research in this direction should prove fruitful.

The *Sthānāṅga Sūtra*, 189 mentions three kinds of *kathās* (literature)-*atthakahā* (arthakathā, on economics),[39] *dhammakahā* (*dharmakathā*, on religion or righteousness, corresponding to *dharmaśāstras*) and *kāmakahā* (*kāmakathā*, on erotics). Of these the classification of *dhammakahā* (statement pertaining to religious topics) given in the *Sthānāṅga Sūtra*, 282 has

some connection with our topic. *Dhammakahā* is classified as follows :

Dhammakahā

(1)	(2)	(3)	(4)
Akkhevaṇī (=*Ākṣepaṇī*, putting on the right path.)	*Vikkhevaṇī* (=*Vikṣepaṇī*, changing the mode of life)	*Saṁveyaṇī* (=*Saṁvejanī*, causing sensitivity)	*Nivvegaṇī* (=*Nirvedanī*, causing loathing or disgust)

Each of these is four-fold as shown below :

(1) *Akkhevaṇī* (=*ākṣepaṇī*-drawing one from the wrong to the right path) — (*a*) *āyāra-akkhevaṇī* (*ācāra*∘), pertaining to the code of conduct and behaviour, bath, tonsure, etc. (*b*) *vavahāra*∘ (*vyavahāra*∘), about expiation, (*c*) *pannatti*∘ (*prajñapti*∘), dismissing doubts by sweet persuasion, (*d*) *diṭṭhivāya*∘ (*dṛṣṭivāda*∘), imparting knowledge from a particular point of view, keeping in view the school of thought of the other party.

(2) *Vikkhevaṇī*, (=*vikṣepaṇī*, changing the way of life from good to bad or from bad to good)—(*a*) exposition of one's own system of thought and its merits followed by an exposition of the rival system and its drawbacks; (*b*) exposition and establishment of one's own system after giving an exposition of the rival line of thought; (*c*) pointing out the points common to both systems of thought and then showing in what respects the rival school differs from one's own and pointing out the defects therein; (*d*) showing in what respect the two systems differ, and then establishing the points common to both.

(3) *Saṁveyaṇī* or *Saṁvegaṇī* (*saṁvedanī* or *saṁvejanī*, causing to feel or causing sensitivity)—*(a) ihaloga-saṁvegaṇī*, causing sensitivity about human existence, that it is impermanent, full of misery, etc; *(b) paraloga-saṁvegaṇī*,

causing sensitivity about the existence of gods, etc., that it also is not above envy, passions, etc.; (*c*) *svasarīra-saṁveganī*, causing sensitivity about one's body, that it is impure and so on; *(d) parasarīra saṁveganī*, causing sensitivity about another's body or about a dead body.

(4) *Nivveganī (nirvedanī*, causing loathing or disgust) — (*a*) The fruit of evil acts committed in this life or world is painful in this very life, (*b*) The fruit of evil acts committed in this world is painful in the other world, (*c*) The fruit of evil acts committed in another life is painful in this life, (*d*) the fruit of evil acts committed in another world (i.e. in a past life) is painful in the other world (i.e, in a life other than the present one). There are four similar varieties for good action.[40]

The first two varieties of *dhammakahā—akkhevaṇī* and *vikkhevaṇī* are relevant to the topic of dialectics, the other two, *saṁvegaṇī* and *nivvegaṇī*, being meant to create sensitivity or loathing in the minds of the audience. The different varieties of *akkhevaṇī* seem to be religious discussions between the teacher and the disciple which may be termed *vāda* or *tattvabubhutsukathā* in the Nyāya terminology or *vītarāgakathā* in the Jaina terminology.[41] Here we have the answers to the charges or objections against the Jaina code of conduct and the like. But in the *vikkhevaṇī kahā* there is exposition of one's own school of thought as well as of the rival school of thought. Such a controversy if held between teacher and pupil would be *vītarāgakathā*, but if held between two parties, where one aims at victory, or both aim at it, would be a *jigīṣukathā*. The first sub-variety seems to have in view the *vādin* who establishes his own view and then exposes the weakness in the view of the opponent; and the second the *prativādin* who exposes the defects in the rival's tenets first and then establishes his own view. In the third and the fourth varieties, each party, it seems, admits the common and acceptable elements of the rival view and

condemns the unacceptable ones. This division may have been meant for religious and philosophical literature, but in India the dialectic element of discourse is reproduced in literature, so it would not be wrong to accept these as pertaining to actual discourses.

Six kinds of *vivāda* (disputation—*jalpa* according to the commentator) are mentioned in the *Sthānāṅga Sūtra*, 512–(1) *Osakkaittā*, (2) *Usakkaittā*, (3) *aṇulomaittā*, (4) *paḍilomaittā*, (5) *bhaittā*, (6) *bhelaittā*. These are, as a matter of fact, not kinds of *vivāda*, but different kinds of tricks employed, by the debaters for attaining victory.

(1) If a debater is not prepared for the debate he slips away from the place under some pretext or sends the opponent away somehow so that he could find enough time for preparation for the debate (*'Osakkaitta' tti avaṣvaṣkya apasṛtyā'vasaralābhāya kālagrahaṇaṁ kṛtvā yo vidhīyate sa tathocyate; evem sarvatra; kvacic ca 'osakkāvaitta' tti pāṭhas tatra pratipanthinaṁ kenāpi vyājenā'pasarpya apasṛtaṁ kṛtvā punar avasaram avāpya vivadate*—Abhayadeva's commentary).

(2) When a person finds that there is full scope for victory he starts speaking eagerly or inspires eagerness in the mind of the opponent and starts the debate immediately.—(*'Osakkaitta' tti utṣvaṣkya utsṛjya labdhāvasaratayotsukībhūya 'ussakkavāitta' tti pāṭhāntare param utsukīkṛtya labdhāvasaro jayārthī vivadate* /-Abhayadeva's comm.). (Compare the *Caraka Saṁhitā's* advice in this respect—*Vimānasthāna* 8.21). Taking into consideration the advice of the *Caraka Saṁhitā*, it seems that the idea of the *osakkaittā* also was to discourage a debate on a subject in which a *vādin* was not as proficient as the *prativādin*, and that of the *ussakkaittā* to encourage one in respect of a topic in which the opponent was not as much at home as the proponent himself was.

(3) The proponent tries by conciliatory measures to make the president or the judges favourable to himself and then enters into a debate, or makes the opponent well inclined

towards himself by accepting his view and then defeats him in a debate *(Tathā 'aṇulomaitta'tti vivādādhyakṣān sāmanītyā'-nulomān kṛtvā pratipanthinam eva vā pūrvaṁ tatpakṣābhyupa-gamenānulomaṁ kṛtvā).* This is how Abhayadeva interprets. But could *aṇulomaittā* not be the same as *anuloma-saṁbhāṣā* of the *Caraka Saṁhitā*?[42]

(4) If the proponent finds that he himself is quite competent to defeat the opponent, he may even incite the opponent and the judges against himself and defeat the oppónent *('paḍilomaitta'tti pratilomān kṛtvā adhyakṣān pratipanthinaṁ vā, sarvathā sāmarthye satīti-* Abhayadeva*).* This may, again, correspond to *vigṛhya–saṁbhāṣā* of the *Caraka Saṁhitā.*

(5) The debate may be entered into after waiting upon the judges and thus influencing them *(' bhaitta'tti adhyakṣān bhaktvā saṁsevya).*

(6) The debate may similarly be entered into after bringing about oneness of view between the favourable members and the other members and the President by bringing them together or after prejudicing the judges against the opponent *(tathā ' bhelaitta'tti svapakṣapātibhir miśrān kāraṇikān kṛtveti bhāvaḥ; kvacit tu 'bheyaitta' tti pāṭhaḥ, tatra bhedayitvā kenāpy upāyena pratipanthinam prati kāraṇikān dveṣino vidhāya sva-pakṣagrāhiṇo veti bhāvaḥ*–Abhayadeva).[43]

Vādadoṣas or defects of debate are mentioned in the *Sthānāṅga Sūtra*, 743—*Dasavihe dose paṁ° taṁ°* (1) *tajjāyadose*, (2) *maibhaṅgadose*, (3) *pasatthāradose*, (4) *pariharaṇadose*, (5) *salakkhaṇa*, (6) *kāraṇa*, (7) *heudose*, (8) *saṁkāmaṇaṁ*, (9) *niggaha*, (10) *vatthudose*. That these defects pertain to debate or discourse is corroborated by a remark in the commentary— *'Ete hi guru-śiṣyayor vādiprativādinor vā vādāśrayā iva lakṣyante.'*

(1) *Tajjātadoṣa*, defect arising from upbringing, or behaviour of the debaters or on account of one of the debaters maintaining silence because of his becoming nervous and embarassed; (2) *Matibhaṅgadoṣa*–defect due to forgetfulness in respect of the occasion for debate, or due to oblivion of thought-

link; (3) *Praśāstṛdoṣa*—when the *Praśāstṛ*, the President or a member becomes partial and declares victory in favour of the opponent, or helps him in any way by giving him hints in regard to what he has forgotten while the debate is going on; (4) *Pariharaṇadoṣa*—going against the rules or conventions fixed by the assembly, and meeting a charge or objection of the opposite party by means of a *jātyuttara*, counterfeit rejoinder, that is to say, not properly refuting the fault pointed out by the opponent; (5) *Svalakṣaṇadoṣa*, defects like 'being too wide' *(ativyāpti)*, etc. in one's own definition or exposition; or fallacies of illustration; (6) *Kāraṇadoṣa*, defect in reasoning or justification, as for example, when one cannot find an illustration to substantiate one's case; (7) *Hetudoṣa*, fallacies of probans like *asiddha* (unreal or unestablished), etc.[44] (8) *Saṁkrāmaṇadoṣa*, changing the proposition or accepting the thesis of the opponent (corresponding to *pratijñāntara* or *matānujñā*; (9) *Nigrahadoṣa*, being subject to one of the *nigrahasthānas* (checks or grounds of censure or defeat); (10) *Vastudoṣa* fallacies of thesis (as when it is contradicted by perception and the like); for example 'word is inaudible'.

The *Sthānāṅga*, 743 mentions also *Viśeṣadoṣas* or particular defects, those mentioned above being defects in general—*dasavidhe visese paṁ*◦ *taṁ*◦— (1) *Vatthu*, (2) *tajjāyadose ta*, (3) *dose*, (4) *egatthiteti ta*, (5) *kāraṇe ta*, (6) *paḍuppaṇṇe*, (7) *dose nicce*, (8) *ahiaṭṭhame*, (9) *attaṇā*, (10) *uvaṇīte ta viseseti ta, te dasa.*

(1) *Vastudoṣaviśeṣa*, *pakṣadoṣaviśeṣa*, particular defects of thesis, e. g contradicted by perception, inference, etc; (2) *tajjātadoṣaviśeṣa*, arising from particular drawbacks in respect of upbringing or lineage and the like; (3) *matibhaṅga* and other faults mentioned above can also be regarded as *doṣa-viśeṣas*—particular faults as against the faults in general; (4) *ekārthika*—The shades of difference in synonymous words (e.g. *Śakra*, *Purandara*), or different words conveying the same meaning. It seems that this *doṣaviśeṣa* originally corresponded to the *nigrahasthāna punarukta* of the *Nyāya-Sūtra* or to Caraka's *adhika* (a fault of statement, *vākyadoṣa;* see *Vimānasthāna*

8.54); (5) *kāraṇaviśeṣadoṣa*, defects of reasoning which are relatively particular in view of the general defects The term is also explained as *pariṇāmi kāraṇa* (constituent cause) and *apekṣā-kāraṇa* (auxiliary cause); or the *kāraṇaviśeṣas* are the *upādāna* (constituent), the *nimitta* (instrumental) and the *sahakāri* (auxiliary) causes. This latter interpretation does not seem to be relevant, unless what is meant is the defect arising in reasoning due to adherence to different theories of causality; (6) *pratyutpanna–doṣaviśeṣa* the obvious faults that lie in regarding things as *pratyutpanna* (existing at the present moment alone), such as *akṛtābhyāgama* (attaining the fruit of actions one has not done), *kṛtavināśa* (losing the fruit of one's action). It may also have meant the defect due to accepting the interpretation that immediately strikes the mind though it be contradicted by other proof. One such *tarkābhāsa* is accepted at a later stage, viz. *prathamopasthitatva*; (7) *nityatvadoṣaviśeṣa*, permanent defects, e.g. *mithyātva* (perversity) in *abhavya* (non-elect) souls, or the faults which accrue on regarding things as absolutely eternal; (8) *adhikadoṣaviśeṣa*, redundancy, the defect due to the use of probative statements in respect of what is already established, or due to the use of more factors than are necessary for establishing a point. This corresponds to the *nigrahasthāna adhika*; (9) *ātmanā kṛta doṣa*, faults for which a person is himself responsible, (10) *paropanīta*, faults alleged by another.

It can be seen that these defects correspond to some of the *nigrahasthānas*, though we cannot always be sure of Abhayadeva's interpretation that it conveys what was originally intended. The *Caraka Saṁhitā* also gives an account of *nigrahashānas* under the heading '*vākyadoṣa*'.

We may note in connection with the topic of debate that the *Sthānāṅga Sūtra*, 534 mentions six kinds of *praśnas* (questions) (*Chauvvihe paṭṭhe paṁ◦ taṁ◦ – saṁsayapaṭṭhe vuggaha–paṭṭhe anujogī aṇulome tahaṇāṇe atahaṇāṇe*) — (*a*) *Saṁśaya praśna*, a question meant for the removal of doubt,[45]

(*b*) *Vyudgraha-praśna,* question motivated by the bias of the questioner, or meant to embarass or defeat the other party. For instance, "Is *viśeṣa* different or non-different from *sāmānya*? If different it would be a non-entity like sky-flower; if non-different it would be *sāmānya* only". (*c*) *Anuyogi-praśna,* a question raised by the person or the writer himself who is discussing a point, for making his own view clear. The *Caraka Saṁhitā* mentions *anuyoga,* in which the opponent asks 'What is the proof ?' when the proponent states his thesis, e.g. 'Soul is eternal'. The *anuyogi-praśna* might have been originally intended to be the same as the *anuyoga* of the *Caraka Saṁhitā.* (*d*) *Anuloma praśna,* a question about health and the like intended to make the other person well disposed to oneself; (*e*) *tathā-jñāna praśna*: when both the parties, the person inquiring and the person explaining have equal knowledge of a subject and still if a question is asked pertaining to that subject it is called *tathā-jñāna praśna*; (*f*) *atathā-jñāna,* the opposite of *tathā-jñāna* (Compare the four kinds of questions mentioned in Buddhist works—*ekāṁśa-vyākaraṇīya, vibhajya-vyākaraṇīya, pratipṛcchā-vyākaraṇīya, sthāpanīya*).

The logical term '*hetu*' is used in a number of senses in the *Sthānāṅga Sūtra,* 338—*Heū cauvvihe paṁ° taṁ° jāvate thāvate vaṁsate lūsate, athavā heū cauvvihe paṁ° taṁ° paccakkhe aṇumāṇe ovamme āgame, aha vā heū cauvvihe paṁ° taṁ°* —(1) *atthittaṁ atthi so heū,* (2) *atthittaṁ ṇatthi so heū,* (3) *ṇatthittaṁ atthi so heū,* (4) *ṇatthittaṁ ṇatthi so heū. Hetu* signifies (*i*) means of proof or sources of knowledge—perception (*pratyakṣa*), inference (*anumāna*), analogy (*aupamya or upamāna*), verbal or scriptural testimony (*āgama*); (*ii*) probans which can be four-fold : (1) This is, because that is (e.g., 'There is fire, because there is smoke), (2) This is not, because that is (e.g., It is not cold, because there is fire); (3) This is, because that is not (e.g. It is cold because fire is not here); (4) This is not, because that is not (e g. There is not smoke, because there is not fire). (*iii*) Argument which is four-fold, of which *yāpaka-sthāpaka* and *vyaṁsaka-lūṣaka* form

contrary pairs. In *yāpaka*, the idea is not to establish what is to be proved, but to give a counterfeit rejoinder to the opponent; the debater tries to while away the time somehow. On the other hand in the *sthāpaka hetu* it is intended to immediately establish the thesis. *Vyaṁsaka* employs *chala* (quibble) and *lūṣaka* employs a counter-quibble in such a manner as to bring about an awkward position for the opponent and to make him ultimately accept the position of the proponent.

Bhadrabāhu (5th-6th cent. A.D.) has, in his *Niryukti* 86ff on the *Daśavaikālika Sūtra*, given an exposition of these by means of parables. We shall utilise his *Niryukti* here as also Abhayadeva's commentary on the *Sthānāṅga Sūtra*, 338.

(*a*) *Yāpaka*—That reason, which being expressed with the help of long drawn epithets so that the opponent cannot understand it quickly and so cannot oppose it immediately, helps to while away the time and so is called *yāpaka*. Or, the reason (probans), whose concomitance with the predicate is not well known and is, therefore, in need of other proofs and thus causes delay in the establishment of the thesis is called *yāpaka*. The parable explaining this is that of a loose woman who sent away her simple husband with faeces of a camel saying they would fetch an enormous price in Ujjayinī and advised him to sell them there. The greedy fool was away for a long time which the woman spent in the company of her paramour (*Ubbhāmigā ya mahilā jāvagaheummi uṇṭaliṇḍāī–Daśavai. Nir.* Gā. 87). The *yāpaka* hetu seems to be a statement of the argument which the audience and the opponent cannot immediately understand and which consequently causes delay (Compare the *nigrahasthāna avijñātārtha*; also *tadvidyena saha kathayatā tv āviddhadīrghasūtrasaṅkulair vākyadaṇḍakaiḥ kathayitavyam*–CS, *Vimānasthāna* 8.20). *Yāpaka hetu* might be responsible for the check '*ajñāna*', when the opponent does not understand what the proponent has to say.

(*b*) *Sthāpaka*—the probans whose concomitance with the predicate is well known and which therefore can establish

what is to be proved immediately. The parable of a *parivrājaka* (wandering mendicant) is given by way of illustration. He used to say that charity given on even ground yields fruits. He claimed that he alone knew the centre of the world. On being asked he would after feigning systematic measurement point to a particular spot as the centre of the world The people had thus great faith in him and he would get much by way of gifts. One clever person exposed him by straightaway denying that the place he pointed out was the centre of the world, on which the *parivrājaka* again measured and showed another spot as the centre of the world. Some people realised that this man was a rogue and was pointing to different places as the centre of the world and there was contradiction in his statements. The idea is that only such an argument should be set forth as would establish the thesis immediately and would not be self-contradictory like the words of the *parivrājaka.* This kind of *hetu* is the contrary of *yāpaka* and is a valid one (*logassa majjha jāṇaṇa thāvagaheū udāharaṇaṁ—Daśavai. Nir.*, 87).

(*c*) *Vyaṁsaka* is a *hetu* which embarasses or confounds the opponent. The parable given is that of *sagaḍa-tittirī* (cart-partridge—the partridge in the cart, or the cart along with the partridge). Some rogue seeing the partridge in the cart asked the cart-man cunningly the price of the *śakaṭa-tittirī.* The cart-man replied, '*Tappaṇālodiyā*' (-parched barley mixed with water; it can also mean 'the woman who mixes them'). The rogue gave the price demanded—parched barley mixed with water—and took away forcibly both the cart and the partridge in the presence of witnesses (*sā sagaḍatittirī vaṁsa-gammi heummi hoi ṇāyavvā–Daśavai. Nir.*, 88). There is *vāk-chala* (verbal quibble) here. Hetu based on quibble is called *vyaṁsaka* (deceiving or confounding); as for example, when an opponent says to a Jaina, "'The soul is' and 'the jar is'; having existence or being in common, the soul and jar are one. If 'being' is something different from the soul, then the soul would not be existent".

(*d*) *Lūṣaka*, robbing : The reply to a *vyaṁsaka hetu* is called a *lūṣaka hetu* inasmuch as it robs the former of all its apparent competence and averts the undesired contingency brought about. In the parable given above, seeing the cart-man depressed and sad, another rogue came to his rescue. And according to his advice, the cartman said to the first rogue, "Alright, give me my *tappaṇāloḍiyā*, you can have the *sagaḍatittirī*." The latter asked his wife to mix barley with water and give it to the cartman in exchange for *sagaḍatittirī*. But seeing her mix the barley with water the cartman seized her by the hand and said, "She is the *tappaṇāloḍiyā*, one who mixes barley with water. So you give her to me and you can have your *sagaḍatittirī*." The rogue was dumb-founded at this (See also *Daśavai. Nir.* 88, where another parable is given). Similarly, the rejoinder to the *vyaṁsaka hetu* proving that soul and jar are one, is, " If the soul and jar are one as you say, then thus all things in the world would be one. But what we find is that jar, cloth etc. are not one, so soul and jar also cannot be one'. This is a *lūṣaka hetu*. The parables illustrative of *vyaṁsaka* and *lūṣaka* are based on *vākchala*, whereas the philosophical illustrations of these are based on *sāmānya-chala*; or *vyaṁsaka-lūṣaka* can be said to correspond to *Aviśeṣasama-jāti* (NS. 5.1.13) and its answer. (Compare also *aviśeṣa-khaṇḍana* in *Tarkaśāstra*, p. 15, and *aviseṣadūṣaṇābhāsa* in *Nyāyamukha*).

Vāk-chala or verbal quibble, it may be noted in passing, is shown as detected and answered by Mahāvīra in the Jaina *Āgamas*. The *Bhagavatī Sūtra*, 18.10 relates that a learned and clever Brāhmaṇa named Somila in order to test Mahāvīra put certain questions to him. Somila asks Mahāvīra whether he could eat '*sarisavayā*' or not. Now '*sarisavayā*' in Prakrit means '*sarṣapa*' (mustard seed) and also '*sadṛśavayas*' (a friend of the same age). He asked similar questions about *māsa* (month, weight for weighing gold or silver, a kind of pulse), *kulatthā* (*kulastrī*, woman of a good family or a kind of cereal). Mahāvīra each time detects the *chala* and explains what

kind of *sarisavayā, māsa, kulatthā* he can eat and what other kinds he cannot.[46]

The term '*nāta*' (*jñāta=udāharaṇa*) has a wider meaning in the Jaina *Āgamas* than in the Nyāya school. It stands for any argument, example, parable, or the like proving or confuting a particular proposition. It has therefore a number of meanings—example, illustrative story, analogy, reasoning. In fact, the *Sthānāṅga Sūtra*, 338 has in the classification of *udāharaṇa* mentioned all the topics connnected with debate, as the *Caraka Saṁhitā* has done in the *Vimānasthāna*. The list in the *Sthānāṅga Sūtra* is different from that in the *Caraka Saṁhitā* and the *Nyāya-sūtra*, and seems to be representative of quite a different tradition.

"*Cauvvihe ṇāte paṁ° taṁ°—āharaṇe āharaṇataddese āharaṇataddose uvannāsovaṇae; āharaṇe cauvvihe paṁ° taṁ°—avāte uvāte ṭhavaṇākamme paḍupannaviṇāsī; āharaṇataddese cauvvihe paṁ° taṁ° aṇusiṭṭhī uvālambhe pucchā nissāvayaṇe; āharaṇataddose cauvvihe paṁ° taṁ°— adhammajutte paḍilome aṁtovaṇīte duruvaṇīte; uvannāsovaṇae cauvvihe paṁ° taṁ° tavvatthute tadannavatthute paḍinibhe hetū.*"-Sth. Sū. 338.[47]

(1) *Āharaṇa*, that by which the unknown thing is made known; here there is complete similarity with what is to be illustrated. *Āharaṇa* is four-fold : (a) *apāya*, reducing the opponent's stand to an absurdity; that is to say, pointing out a contingency in the opponent's argument and advising him to give up his stand. As Bhadrabāhu says, (*Daśavai. Nir.* 59—60), those who regard the soul as absolutely eternal or absolutely momentary cannot explain the occurrence of pleasure, pain, metempsychosis and salvation. Therefore it is proper to give up these extremes and resort to *Anekānta*, the non-absolutistic stand-point. *Apāya* corresponds to *prasaṅgāpādana* of the logicians—reducing to an absurd position. *Apāya* can also mean confutation in general. (*b*) *Upāya* : the particular operation achieving or establishing a thing is called *upāya*; as for example, adducing a reason which can establish the existence of the soul (see *Daśavai. Nir.* 63-67). It seems that '*upāya*' in

'*Upāyahṛdaya*' has the same sense. *Apāya* and *upāya* correspond to *dūṣaṇa* (confutation) of *parapakṣa* and *sādhana* (establishing) of *svapakṣa*. (*c*) *Sthāpanā-karma* presenting an argument correctly after refuting the charges brought against it. If the opponent points out that the reasoning of the *vādin* is faulty or inconclusive and the latter answers this and establishes his own point in the true light, it is *sthāpanā-karma*. In view of Bhadrabāhu's explanation,[48] *sthāpanā-karma* corresponds to *parihāra* of the *Caraka Saṁhitā* (*Vimānasthāna*, 8.60), but in verbal similarity it corresponds to *sthāpanā* of the *Caraka-saṁhitā*, establishing the proposition by means of reason, example, application and conclusion (*Vimānasthāna* 8.31). Abhayadeva illustrates this as follows : Sound is non-eternal, because it is a product (*anityaḥ śabdaḥ kṛtakatvāt*). Here the opponent objects that the probans 'because it is a product' is inconclusive because sound in the form of letter-sound is eternal. On this the proponent answers this objection by saying that even letter-sounds are non-eternal since they are different according as their respective causes are different, like jar and cloth which are non-eternal and are different because their causes are different. (*varṇātmā śabdaḥ kṛtakaḥ nijakāraṇabhedena bhidyamānatvāt ghaṭapaṭādivat*). Here with the help of the illustration of jar, etc. sound in the form of letters is proved to be non-eternal, so this is *sthāpanā-karma*. (*d*) *Pratyutpanna-vināśī*, that which sets aside a proposition immediately. For instance : a Nihilist says, "When all things are non-existent, how could the soul be existent ?" To this it can be immediately answered, "In that case does this negating statement exist or not ? If it does, then all things cannot be non-existent; if it does not, then how could all things be negated ? Moreover this negation of the soul depends on your intention or desire. If the soul itself does not exist how could there be any intention or desire to say something? Thus the very possibility of the negating statement proves the existence of the soul." (See *Daśavai. Nir.* 70–72; compare *Vighraha-vyāvartanī*, 1). Applying the check *Pratijñāhāni* is a case of *pratyutpanna–vināśi āharaṇa*.

(2) *Āharaṇataddeśa*, having similarity in respect of only certain attributes to the thing illustrated. It has four sub-varieties : (*a*) *Anuśiṣṭi*, accepting the view of the opponent partly, and advising him of the correct position with regard to the rest. For instance, the Jaina tells the Sāṁkhya, "True, the soul exists, but it is not non-doer; it is a doer as it experiences pleasure, pain, etc.; if even a non-doer were to experience pleasure, pain then no one could be emancipated". (See *Daśavai, Nir*. 75) The *anuśiṣṭi*, type of parable is one from which one gets the advice that what is good should be praised and admitted. (*b*) *Upālambha*, correcting a defect in another's stand; as for instance, telling a Cārvāka that if the soul does not exist then his erroneous conviction that the soul does not exist is not possible. No knowledge whether it be of the existence or of the non existence of the soul is possible without the existence of a sentient soul. The insentient jar cannot have such a cognition. (See *Daśavai. Nir.* 76–77). From the *upālambha* type of parables, one gets the instruction that a person should be reprimanded for bad qualities or vices. It may be noted here that Caraka has defined *upālambha* as exposing the fallacy of reason; it may also mean exposing the weakness in an argument. (*c*) *Pṛcchā*, questioning, that is to say, proving one's view and refuting another's by repeated questions. For example, a person may ask a Cārvāka. 'Why is the soul non-existent ?' The Cārvāka replies that it is so because it cannot be perceived. Again the former asks, "If the soul is non-existent only because it is not perceived, then your misconception negating the soul is also not perceived by others, so it is non-existent; then how could it deny the soul?" Here the intention is to prove the existence of the soul and this is done by asking questions after accepting for the time being the Cārvāka position. The parables of the type of *pṛcchā* teach that one must always go to a wise man for instruction and ask him prudent questions only.

(d) *Niśrāvacana*: advising a third party under the pretext of advising the person addressed, as when a teacher gives instruction to his pupils but expects that others also would be enlightened. For instance, a believer in the existence of the soul tells his pupil that the fruit of charity and the like cannot be justified in the view of one who does not believe in the existence of the soul. The Cārvāka hearing this intervenes by saying, "This might be true, what do we lose ?" To this the teacher says that in that case the different kinds of souls could not be justified (see *Daśavai. Nir.* 80). From the *niśrāvacana* type of parables one comes to know that when we want to give some advice to an arrogant person we can do so by addressing a mild man of faith.

(3) *Āharaṇa-taddoṣa,* defective example, explanation devoid of the mention of probans or probandum or of both. It also has four sub-varieties: (*a*) *Adharmayukta*, sinful, committing a sinful act, or giving instruction likely to incite sinful ideas in the mind of the hearer for the benefit of the teaching of one's own school. For instance, the opponent Poṭṭaśāla Parivrājaka being defeated created scorpions by force of his mysterious power for the destruction of Rohagupta. The latter in turn created peacocks for the destruction of these scorpions. This is a sinful act, but Rohagupta had to do it for the preservation of his own tenets (See *Daśavai. Nir.* 81, *Cūrṇi* and *Vṛtti*; also *Viśeṣāvaśyakabhāṣya*, 2956). (*b*) *Pratiloma*, adopting the policy of tit for tat, as Rohagupta did for defeating Poṭṭaśāla Parivrājaka. The Parivrājaka deliberately argued in favour of the Jaina view, on which the opponent, the Jaina thinker Rohagupta, in order to defeat him supported the Trairāśika view which is opposed to the Jaina view. This act of his because it would aid a false view is classified as *āharaṇataddoṣa* (—see *Viśeṣāvaśyakabhāṣya*, 2956). This can be compared with the *nigrahasthāna apasiddhānta* (NS. 5.2.24) wherein the person arguing does not side with an alien view, but taking his stand on his own doctrines makes a

statement which contradicts his own theories and is in line with those of an alien school; only he does so ignorantly, whereas in *pratiloma*, supporting of an alien view is a deliberate act. (*c*) *Ātmopanīta,* making a statement which refutes or contradicts one's own view. As for example, '*Ekendriyas* (creatures having one sense-organ) have a soul, because their breathing is clearly perceived'—(see *Daśavai. Nir* 83). This is evidently the fallacy *asiddha*; but Haribhadra explains it by citing the negative instance of jar wherein breathing is not visible. This really proves that the person arguing is also an ekendriya! (*d*) *Durupanīta*, making a statement which does not prove, or even proves the contrary of, what is to be proved (–especially when the example cited is devoid of the probandum); for example, 'Word is eternal, like jar,' or '*Nirvāṇa* is cutting off of the continuum, as in the case of the lamp' (-this proves the beginningless continuum to be a non-entity); or saying, in excitement or nervousness, 'Jar is non-eternal, because it is a product, like word' instead of saying, 'Word is eternal..., like jar'. In religious circles, *durupanīta* may also signify a statement which lowers the reputation of one's religion or faith; as for examble, the following words of a Buddhist monk who w s going with a net in his hand to catch fish. A cunning man accosted him saying his garment had holes in it. The monk said it was a net to catch fish with. 'Do you eat fish?' 'I relish it with wine.' 'Do you drink wine?' 'Yes, in the company of a prostitute.' 'Do you visit a prostitute?' 'Yes, winding my feet round the neck of my enemies' 'Where are your enemies?' 'Those whose house I break.' 'You are a thief!' 'Yes, I have to commit theft for gambling.' 'How is it that you are a gambler? 'Because I am the son of a maid-servant.'

(*Kanthā" cāryā' ghanā te nanu śapharavadhe jālam aśnāsi matsyān te me madyopadaṁśāḥ pibasi nanu yuto veśyayā yāsi veśyām, Kṛtvā' rīṇāṁ gale' ṁhrī kva nu tava ripavo yeṣu sandhiṁ chinadmi cauras tvam dyūtahetoḥ kitava iti kathaṁ yena dāsīsuto'smi*). (—See Abhayadeva's comm. on Sth. Sū. 338; and Haribhadara's comm. on *Daśavai. Nir.* 83).

(4) *Upanyāsopanaya* employing the very argument of the opponent so as to confute his view. For instance, if one party says, 'Soul is non-doer, because it is incorporeal, like ether', the other party can give a rejoinder to the effect, 'In that case, like ether it must be non-enjoyer also. This corresponds to *jāti*. Its sub-varieties are: (*a*) *Tadvastūpanyāsa*, adducing the probans put forward by the opponent himself and condemning his argument; for example, suppose some one argues, 'Soul is eternal, because it is incorporeal'; to this if the reply be given that *karma* (action) is non-eternal though incorporeal, it would be a case of *tadvastūpanyāsa*. This corresponds to the *pratidṛṣṭāntasama jāti* (NS. 5.1.9) of the Naiyāyikas. (*b*) *Tadanyavastūpanyāsa*, applying the argument of the opponent to another parallel case and thus proving it false. For instance, the opponent says, "Soul is different, body is different; both being signified by the term 'different' are one". The answer to this is that in that case atom, jar, cloth, etc. which are all said to be 'different' would be one; therefore the body and the soul are different and not one (—see *Daśavai. Nir.* 84). This corresponds to *prasaṅgāpādana*, reducing the opponent's position to absurdity by showing that it leads to a consequence which is not acceptable. (*c*) *Pratinibhopanyāsa*, giving a reply which is similar to the statement of the opponent to silence him. For instance, a proud debater who believes that there can be no flaw in his argument says 'I say that the soul is existent. Now, you say something.' To him the rejoinder is given, 'Jar also is existent, so jar also should be soul.' A parable illustrating *pratinibhopanyāsa* is that of a *sannyāsin* who used to boast that he had heard of everything and that he would present a gold vessel to one who told him something he had not heard before. A clever person took up the challenge. He said, "Your father owed my father a lakh. If this is something you have heard before, kindly return that amount; if not, give me a gold vessel".[49] *Pratinibhopanyāsa* corresponds to *sāmānya chala* and can also be compared with *lūṣaka hetu*. (*d*) *Hetūpanyāsa*, adducing a reason (a smart one) in reply

to another's question. For instance, some one asks, 'Why are soul, eyes, etc. not perceived by the senses?' The answer is 'Because they are supersensuous.' Or 'Why are you purchasing barley'? 'Because I do not get it gratis'. (*Daśavai. Nir.*, 85). As a matter of fact, this is no explanation at all; it is just a smart repartee.

It is evident from the above discussion that the terminology of the Jaina *Āgamas* for dialectical topics is different from that of the Nyāya and the Buddhist schools. We find reflected in it an ancient tradition different from that to which the Nyāya and the Buddhist schools adhered. The Jaina *Āgama* literature is quite rich in the exposition of dialectical principles. They primarily pertain to ethical and religious discussions but apply with equal force to debates, philosophical or otherwise. We may further mention that the *Anuyogadvāra Sūtra*, 144 gives a three-fold classification of *anumāna* (inference): (*a*) *puvvava* (*pūrvavat*), (*b*) *sesava* (*śeṣavat*), which has again five sub-varieties according as the probans is an effect, cause, quality, part or limb of the probandum, or is resident in it, (*c*) *diṭṭhasāhammava* (*dṛṣṭasādharmyavat*) which has two sub-varieties, *sāmaṇṇadiṭṭha* and *visesadiṭṭha*. These three divisions correspond to the *pūrvavat*, *śeṣavat* and *sāmānyato-dṛṣṭa* of the *Caraka-saṁhitā*, the *Nyāya-sūtra*, the *Upāyahṛdaya* and other works. Nowhere else in Jaina literature do we come across this three-fold classification of inference. This will be discussed later in the chapter on Valid Reasoning. The *Sthānāṅga Sūtra*, 338 and the *Bhagavatī Sūtra* (5.3.191–192) besides others mention the four *pramāṇas* (sources of knowledge) —*pratyakṣa* (perception), *anumāna* (inference), *aupamya* (analogy) and *āgama* (scriptural testimony). This shows that the Jaina thinkers were also familiar with traditions different from their own.

Bhadrabāhu has in his *Niryukti* on the *Daśavaikālika Sūtra* stated that there may be five or ten *avayavas* (members) in a syllogism; elsewhere he says that even the example by itself or the reason and the example can prove what

is to be proved. He has given two sets of ten *avayavas*–(*a*) *pratijñā*, *pratijñā-viśuddhi*, *hetu*, *hetu-viśuddhi*, *dṛṣṭānta*, *dṛṣṭānta-viśuddhi*, *upasaṁhāra*, *upasaṁhāra-viśuddhi*, *nigamana*, *nigamana-viśuddhi*; (*b*) *pratijñā*, *pratijñā-vibhakti*, *hetu*, *hetu vibhakti*, *vipakṣa*, *pratiṣedha*, *dṛṣṭānta*, *āśaṅkā*, *tatpratiṣedha*, *nigamana*.[50] A ten-membered syllogism must have been in vogue in earlier times, which was transformed into the logical one of five members.

The *Niśīthabhāṣya* (5th *Uddeśaka*, *Gāthā* 2129) mentions the varieties of *kathā* (discourse, controversy), among them being *vāda*, *jalpa* and *vitaṇḍā* (*vādo jappa vitaṇḍā paiṇṇagakahā ya ṇicchayakahā ya*). These terms do not figure in the original *Āgamas*, but were admitted in the age of the commentaries.

It may be observed here that the *Anuyogadvāra Sūtra* (pp. 261 ff– Āgamodaya Samiti) also speaks of thirty two *doṣas* (faults) to be avoided in an expression. A few of these *doṣas* are ethical, some are logical and others literary. The *doṣas* mentioned are : (1) *alīka*, stating that which is not a fact and suppressing that which is a fact, (2) *upaghātajanaka*, inciting violence towards a living being, like the Vedic injunction to perform animal sacrifice, (3) *nirarthaka*, meaningless jumble of sounds, (4) *apārthaka*, words intelligible by themselves but not forming a meaningful sentence, (5) *chala*, quibble, (6) *druhila*, an ethical *doṣa* (–involving *droha*?) like the second one, (7) *niḥsāra*, devoid of reasonableness, trifling, (8) *adhika* comprises two flaws—hypermetrical and too many words, (9) ūna—metrically wanting in syllables ,insufficient expression and deficient in *hetu* and *dṛṣṭānta*: this comprises thus three flaws, metrical, literary and logical; (10) *punarukta*, redundant in word and in meaning (–two varieties), (11) '*vyāhata*, inconsistent (*pūrvāpara—vyāghāta*), (12) *ayukta*, untenable (*anupapatti-kṣama*),' (13) *krama-bhinna*, devoid of proper order, (14) *vacana-bhinna*, incongruent number, (15) *vibhakti-bhinna*, incongruent case, (16) *liṅga-bhinna*, incongruent gender, (17) *anabhihita*, stating a tenet not belonging to a scriptural text, (18) *apada*, drifting into another metre (*anyac*

chandaḥ), (19) *svabhāva-hīna*, against nature or worldly practice *loka-viruddha*), (20) *vyavahita*, long digression, or construction, where words that are remotely separated have to be construed together; (21) *kāla-doṣa*, wrong tense and mood, (22) *yati-doṣa*, a metrical flaw, (23) *chavi-doṣa*, fault of being devoid of colour, or figure, *alaṁkāra*. (The commentary explains *chavi* as *alaṁkāra-viśeṣa*. Is any particular figure meant ?) (24) *samayaviruddha*, similar to *anabhihita*, only here something is misrepresented, (25) *vacana-mātra*, simply stating a thing without giving any reason to justify it, (26) *arthāpatti-doṣa*, flaw in implication—a logical flaw, (27) *samāsa-doṣa*, (28) *upamā-doṣa—hīnopamā*, *adhikopamā*, *anupamā* (citing wrong simile), (29) *rūpaka-doṣa*, inaccurate description of the form of an object (—*rūpaka* here means *rūpa*, form); (30) *nirdeśa-doṣa* is explained as absence of *ekavākyatā* of the words uttered and is illustrated by a sentence devoid of a verb, (31) *padārtha-doṣa*, false argument based on the second meaning of the synonym of the word in question, (32) *sandhi-doṣa*.

Many of these *doṣas* are met with in *Nyāya-sūtra* 5.2, where the *nigrahasthānas* (grounds of censure) are enumerated and dealt with. Some of these *doṣas* are met with in the *doṣa* section of works on *Alaṁkāra Śāstra*.[51] This gives us an idea of the commonly accepted views regarding style useful in poetry, debating, etc.

Thus from the literature of the pre-*dārśanika* period it is quite evident that debates were in vogue and there is every likelihood of there having been some literature on dialectic. Further in religious debates and discussions the knowledge of dialectic was indispensable, and we find, especially in the Buddhist *Piṭakas* and the Jaina *Āgamas* many a hint as to how the opponent could be confounded and even silenced. Different traditions of logic and dialectics were prevalent as can be seen from the different dialectical terminology employed by the works of different schools. In the *Caraka Saṁhitā* we find a rare combination and systematic exposition of dialectical topics which, as we shall see,

are more allied to the tradition adhered to by the *Upāya-hṛdaya*, a Buddhist work, than to that of the *Nyāya-sūtra*. Several *Āgamic* terms can be understood in the light of the exposition in the *Caraka Saṁhitā* to which therefore a separate chapter is devoted.

NOTES

1 See the definition of *Adhikaraṇa* (Topic) or Section —
Viṣayo viṣayaś caiva pūrvapakṣas tathottaram;
saṅgatiś ceti pañcāṅgaṁ śāstre'dhikaraṇaṁ smṛtam.

2. See *A History of Philosophy*, p. 87, Section 8ff-Windelband.

3. Compare the views of Ajita Keśakambalin and others as recorded in Buddhist and Jaina Canonical literature.

4. See *Dīgha Nikāya*, 1.33. *Tarkavidyā*, especially when carried to an extreme, was condemned in certain Brāhmaṇical circles also. See *Manu-Smṛti*, 2.11; *Rāmāyaṇa* 2. 100, *Mahābhārata*, *Śānti*, 180. 47–49; 246.18.

5. *Buddhist Logic*, Vol. I, p. 28—Stcherbatsky.

6. UH, pp. 3–4, (*Pre-Diṅnāga Buddhist Texts on Logic*-Tucci.

7. *Buddhist Logic*, Vol. I, p. 27-Stcherbatsky.

8. See *History of Indian Logic*—S.C.Vidyābhūṣaṇa (pp. 22ff for Brāhmaṇical literature, pp. 225–250 for Pali literature, and pp. 157–163 for Jaina canonical literature.

9 Āgamenā'numānena dhyānābhyāsarasena ca,
tridhā prakalpayan prajñāṁ labhate yogam uttamam.
iti smṛteś ca /-*Nyāyakusumāñjali*, 1.p. 5.

10 Compare *vedāvirodhi tarka* of the orthodox schools of philosophical thought.

11. See *Manu Smṛti*, 12.110–111, *Parāśara Smṛti*, 8. 19, *Yājñavalkya Smṛti*, 1. 9.

12 Navabhir navabhiś caiva doṣair vāgbuddhidūṣaṇaiḥ,
apetam upapannārtham aṣṭādaśaguṇānvitam. 78
saukṣmyaṁ saṅkhyā-kramauc obhau nirṇayaḥ saprayojanaḥ,
pañcaitāny artha-jātāni vākyam ity ucyate nṛpa. 79
eṣām ekaikaśo'rthānāṁ saukṣmyādīnāṁ sulakṣaṇam,
śṛṇu saṁsāryamāṇānāṁ padārthaiḥ pada-vākyataḥ. 80
jñānaṁ jñeyeṣu bhinneṣu yathā bhedena vartate,
tatrātiśāyinī buddhis tat saukṣmyam iti vartate. 81
doṣāṇāṁ ca guṇānāṁ ca pramāṇam pravibhāgaśaḥ,
kaṁcid artham abhipretya sā saṁkhyety upadhāryatām. 82
idaṁ pūrvam idaṁ paścād vaktavyaṁ yad vivakṣitam,
kramayogaṁ tam apy āhur vākyaṁ vākyavido janāḥ. 83
dharmārtha-kāma-mokṣeṣu pratijñāya viśeṣataḥ,
idaṁ tad iti vākyānte procyate sa vinirṇayaḥ. 84
icchā-dveṣabhavair duḥkhaiḥ prakarṣo yatra jāyate,
tatra yā nṛpate vṛttis tat prayojanam iṣyate. 85
tāny etāni yathoktāni saukṣmyādīni janādhipa,
ekārtha-samavetāni vākyaṁ mama niśāmaya. 86
upetārtham abbinnārthaṁ nāpavṛttaṁ na cādhikam,
nā'ślakṣṇāṁ na ca sandigdhaṁ vakṣyāmi paramaṁ tava, 87
na gurvakṣara-sambaddham parāṅmukhamukhaṁ na ca,
nānṛtaṁ na trivargeṇa viruddhaṁ nā'py asaṁskṛtam. 88
na nyūnaṁ kaṣṭaśabdaṃ vā vyutkramābhihitaṁ na ca,
na śeṣaṁ, nānukalpena niṣkāraṇam ahetukam. 89
kāmāt krodhād bhayāl lobhād dainyād ānāryakāttathā,
hrīto' nukrośato mānān na vakṣyāmi kathaṁcana. 90
vaktā śrotā ca vākyaṁ ca yadā tv avikalaṁ nṛpa,
samam eti vivakṣāyāṁ tadā so'rthaḥ prakāśate. 91
vaktavye tu yadā vaktā śrotārom avamanyate,
svārtham āha parārthaṁ vā tadā vākyaṁ na rohati. 92
atha yaḥ svārtham utsṛjya parārthaṁ prāha mānavaḥ,
viśaṅkā jāyate tasmin vākyam tad api doṣavat. 93
yas tu vaktā dvayor artham aviruddham prabhāṣate,
śrotuś caivātmanaś caiva sa vaktā netaro nṛpa. 94
tad arthavad idaṁ vākyam upetaṁ vākyasampadā.
avikṣiptamanā rājannekāgraḥ śrotum arhasi. 95

—*Mahābhārata*, *Śāntiparva*, 308. 78–95. The requisites of a good speech *vāgv-iśeṣa* are found mentioned in a number of works of different schools (see UH, p. 12).

Also—
Vedopaniṣadāṁ vettā ṛṣiḥ suraguṇārcitaḥ,
itihāsapurāṇajñaḥ purākalpaviśeṣavit. 2
nyāyavid dharmatattvajñaḥ ṣaḍaṅgavid anuttamaḥ,
aikya-saṁyoga-nānātva-samavāya-viśāradaḥ. 3
vaktā pragalbho medhāvī smṛtimān nayavit kaviḥ,
parāparavibhāgajñaḥ pramāṇakṛtaniścayaḥ. 4
pañcāvayava-yuktasya vākyasya guṇadoṣavit,
uttarottaravaktā ca vadato'pi Bṛhaspateḥ,
dharmārthakāmeṣu yathāvat kṛtaniścayaḥ. 5
—after MBH II. 5. 1 (not included in the Critical Edition).

13 Tad āha Nāradaḥ—
Sāras tu vyavahārāṇāṁ pratijñā samudāhṛtā.
taddhānau hīyate vādī taraṁ stām uttaro bhaved. iti
—NM II, p. 193.

14 Atharvavedapravarāḥ pūga-yājñikasammatāḥ,
saṁhitām īrayanti sma padakramayutāṁ tu te. 33
śabda-saṁskāra-saṁyuktaṁ bruvadbhiś cāparair dvijaiḥ
nāditaḥ sa babhau śrīmān brahmaloka ivā" śramaḥ. 34
yajña-saṁskāravidbhiś ca kramaśikṣāviśāradaiḥ,
nyāyatattvārtha-vijñāna-sampannair veda-pāragaiḥ.35
nānāvākyasamāhāra-samavāya-viśāradaiḥ,
viśeṣakāryavidbhiś ca mokṣadharma-parāyaṇaiḥ. 36
sthāpanākṣepa-siddhānta-paramārthajñatāṁ gataiḥ,
lokāyatika-mukhyaiś ca samantād anunāditam. 37
—MBH—*Ādiparva*, 64. 33—37.

15 Tasmin yajñe pravṛtte tu vāgmino hetuvādinaḥ,
hetuvādān bahūn āhuḥ paraspara-jigīṣavaḥ.—MBH 14.87.1.

16 Evaṁ obhāsitam eva takkikānaṁ—yāva sammāsambuddhā loke nuppajjanti, na takkkā sujjhanti na cā'pi sāvakā, duddiṭṭhī na dukkhā pamuccare iti.—*Udāna*, 6.10.23.

17 *Pañha-byākaraṇasutta*—cattāri'māni, bhikkhave, pañhabyākaraṇāni. katamāni cattāri. atthi bhikkhave, pañho eka-saṁbyākaraṇīyo, atthi bhikkhave, pañho vibhajjabyākaraṇiyo,atthi bhikkhave pañho paṭipucchābyākaraṇīyo, atthi bhikkhave pañho ṭhapanīyo. imāni kho bhikkhave cattāri pañha-byākaraṇānī'ti.

"ekaṁsavacanaṁ ekaṁ, vibhajjavacanāparaṁ,
tatiyaṁ paṭipuccheyya, catutthaṁ pana ṭhāpaye.
yo ca tesaṁ tattha tattha jānāti anudhammataṁ,
catupañhassa kusalo āhu bhikkhu tathāvidhaṁ.

durāsado duppasaho gambhīro duppadhaṁsiyo,
atho atthe anatthe ca ubhayassa hoti kovido.
anatthaṁ parivajjeti, atthaṁ gaṇhāti paṇḍito,
atthābhisamayā dhīro paṇḍito ti pavuccatī' ti.
—*Aṅguttara Nikāya* 4.5.2.

18 Cattāri'māni Mahārāja pañhabyākaraṇāni. katamāni cattāri? ekasaṁbyākaraṇīyo pañho, vibhajjabyākaraṇīyo pañho, paṭipucchā-byākaraṇiyo pañho, ṭhapanīyo pañho' ti. katamo ca Mahārāja eka-saṁbyākaraṇiyo pañho? rūpam aniccaṁ ti eka-saṁbyākaraṇiyo pañho. vedanā aniccā'-ti. pe. saññā aniccā'ti. pe. saṅkhārā aniccā' ti. pe. viññāṇam aniccaṁ'ti eka-saṁbyākaraṇīyo pañho. ayaṁ eka-saṁbyākarṇīyo pañho. Katamo vibhajja-byākaraṇīyo pañho? aniccaṁ pana rūpaṁ'ti vibhajja-byākaraṇiyo pañho, aniccā pana vedanā' ti, aniccā pana saññā'ti, aniccā pana saṅkhārā'ti, aniccaṁ pana viññāṇaṁ'ti vibhajja-byākaraṇiyo pañho. ayaṁ vibhajja-byākaraṇīyo pañho. Katamo paṭipucchā-byākaraṇiyo pañho? kiṁ nu kho cakkhunā sabbaṁ vijānātī'ti ayaṁ paṭipucchā-byākaraṇiyo pañho. Katamo ṭhapaniyo pañho? sassato loko'ti ṭhapaniyo pañho, asassato loko'ti, antavā loko'ti, anantavā loko'ti, antavā ca anantavā ca loko'ti, nevantavā nānantavā loko'ti, taṁ-jivaṁ-taṁ-sarīraṁ'ti, aññaṁ-jīvaṁ-aññaṁ-sarīraṁ'ti, hoti-tathāgato-paraṁ-maraṇā'ti, na-hoti-tathāgato-paraṁ—maraṇā'ti, hoti-ca-na-hoti-ca-tathāgato-paraṁ-maraṇā'ti, neva-hoti-na-na-hoti-tathāgato-paraṁ-maraṇā'ti ṭhapanīyo pañho, ayaṁ ṭhapaniyo pañho. Bhagavā Mahārāja therassa Māluṅkyaputtassa taṁ ṭhapanīyaṁ pañhaṁna byākāsi, so pana pañho kiṁ-kāraṇā ṭhapanīyo? na tassa dīpanāya hetu vā, kāraṇaṁ vā atthi tasmā so pañho ṭhapaniyo. na' tthi bhagavantānaṁ buddhānaṁ akāraṇaṁ ahetukaṁ giraṁ udīraṇaṁ'ti.
—*Milindapañho*, 4.2.5.

In Ibid 4.8.67 also there is mention of *ṭhapanīyo pañho*, also called *avisayo* (beyond one's power). See *Dīgha Nikāya*. 33; also '*Pañho*' in '*A Dictionary of the Pāli Language*'—R. C. Childers (London, 1909).

The *Sūtrakṛtāṅga* 1.14.22 recommends *Vibhajyavāda* (*bhikkhu vibhajjavāyaṁ ca viyāgarejja*). The *Vibhajyavāda* in the Jaina school developed into the *Anekāntavāda* (the theory of Non-absolutism). See also *Bhagavatī* 7.2.270; 12.2.443, etc.

It may be noted that the author of the *Yogabhāṣya* seems to be acquainted with the Buddhist methodology. He classifies questions under three heads : (*i*) *ekāntavacanīya*, questions which can be directly and definitely answered, (*ii*) *vibhajya-vacanīya*, questions which can be answered only by analysis or division, (*iii*) *avacanīya*, unanswerable questions (*Bhāṣya* on *Yoga-sūtra IV*. 33).

19 *Paṭisambhidā*, analysis. See *Points of Controversy*, pp.377-382—S.Z. Aung and Mrs. Rhys Davids (Pali Text Society, London, 1915). The scope of the four-fold *paṭisambhidā* is entirely logical. While it is regarded as superior to popular knowledge it is distinct from intuitive knowledge. Men of the world may develop it but not intuition, whereas the *Arhats* who attain to intuition might not have developed it to any great extent.

20 Pañcannaṁ, bhikkhave, puggalanaṁ kathā dukkathā puggale puggalaṁ upanidhāya. Katamesaṁ pañcannaṁ? asaddhassa bhikkhave, saddhā-kathā dukkathā, dussīlassa sīlakathā dukkathā, appassutassa bāhusacca-kathā dukkathā, maccharissa cāgakathā dukkathā duppaññassa paññā-kathā dukkathā. Pañcannaṁ, bhikkhave, puggalānaṁ kathā sukathā puggale puggalaṁ upanidhāya. katamesaṁ pañcannaṁ? saddhassa, bhikkhave, saddhā-kathā sukathā, sīlavato sīlakathā sukathā; bāhussutassa bāhusaccakathā sukathā cāgavato cāga-kathā sukathā, paññavato paññā-kathā sukathā—*Aṅguttara Nikāya* 5.16.7.

21 *See Aṅguttara Nikāya* 10.5.1, 10.5.2, 7.4.6, etc.

22 See *Aṅguttara Nikāya*, 10.7.9,10.

23 *Points of Controversy*, Prefatory Notes, pp. xlviii-l- S. Z. Aung and Mrs. Rhys Davids (Pali Text Society, London, 1915). See also Ibid, pp.8-63 and The *Debates—Commentary*, pp. 9-43—B C. Law (Pali Text Society, London, 1940).

24 Bahūni ca'ssa satthāni uggahitāni honti, seyyathī'daṁ sutti sammuti saṅkhyā yogo nīti visesikā gaṇikā gandhabbā..māyā hetu mantanā.... vacanena ekūna-vīsati. Vitaṇḍavādī durāsado duppasaho puthutitha-karānaṁ aggama'kkhāyati....*Milinda Pañho*, 1.9. *Nīti* is explained by some as *Nyāya*, logic, and by others as Ethics. Similarly, *hetu* is interpreted by some as logic, and by others as 'causation.'

25 See Ibid 1.10.

26 See *Dīgha Nikāya*, *Sāmaññaphala-sutta* where Ajātaśatru is described as visiting these six famous Sophists.

27 Rājā āha-Bhante Nāgasena, sallapissasi mayā saddhiṁ'ti. sa ce tvaṁ Mahārāja paṇḍitavādaṁ sallapissasi; sallapissāmi. sa ce pana rājavādaṁ sallapissasi na sallapissāmī'ti. Kathaṁ bhante Nāgasena paṇḍitā sal-lapantī'ti. paṇḍitānaṁ kho Mahārāja sallāpe āveṭhanaṁ pi kayirati, nibbeṭṭhanaṁ pi kayirati, niggaho'pi kayirati, na ca tena paṇḍitā kuppanti. evaṁ kho mahārāja paṇḍitā sallapantī'ti. Kathaṁ pana bhante rājāno sallapantī'ti. Rājāno kho Mahārāja sallāpe ekaṁ vatthuṁ paṭijānanti, yo taṁ vatthuṁ vilometi tassa daṇḍaṁ āṇāpenti-imassa

daṇḍaṁ, paṇethā' ti. evaṁ kho Mahārāja rājāno sallapantī'ti. Paṇḍita-vādā'haṁ sallapissāmi, no rāja-vādaṁ. vissattho bhadanto sallapatu yathā bhikkhunā vā sāmaṇerena vā upāsikena vā ārāmikena vā saddhiṁ sallapati, eva vissattho bhadanto sallapatu mā bhāyatū'ti. Suṭṭhu Mahārājā' ti thero abbhanumodi.—*Milinda-pañho*, 2.6.

28 *Questions of King Milinda*, p. 46-Rhys Davids (SBE Vol. XXXV).

29 *Milindpañho—Meṇḍaka-pañho*, 1.1.

30 Bhante Nāgasena ime titthiyā evaṁ bhananti—yadi buddho pūjāṁ sādiyati na parinibbuto buddho, saṁyutto lokena antobhaviko lokasmiṁ lokasādhāraṇo tasmā tassa kato adhikāro vañjho bhavati aphalo. yadi parinibbuto visaṁyutto lokena nissaṭo sa babhavehi, tassa pūjā nu'ppajjati, parinibbuto na kiñci sādiyati, asādiyantassa kato adhikāro vañjho bhavati aphalo'ti ubhatokoṭiko eso pañho neso visayo āpattamāṇasānaṁ, mahantanam yeve' so visayo bhinde' tam diṭṭhijātaṁ, ekaṁse ṭhapaya, tave' so pañha anuppatto, anāgatānaṁ jinaputtānam cakkhuṁ dehi parappavādaniggahāyā'ti.—Ibid 4.1.11.

31 Katamaṁ taṁ kāraṇaṁ ? atthi kho Mahārāja, tena bhagavatā jānatā passatā arahatā sammāsambuddhena anubhūtāni paribhoga-saṇḍāni, seyyatthī'daṁ—cattāro satipaṭṭhānā, cattāro sammappadhānā...satta bojjhaṅgā, ariyo aṭṭhaṅgiko maggo; yehi sadevako loko jānāti saddahati—atthi so bhagavā'ti iminā Mahārāja, kāraṇena, iminā hetunā, iminā nayena iminā anumānena ñātabbaṁ atthi so bhagavā'ti —Ibid 5.3.

32 Lalita-vistara, Ch. 12, p. 108.

33 The twelfth *Aṅga*, which was called *Dṛṣṭivāda* is not extant. It consisted of five parts, in the first part of which logic is said to have been dealt with. Nothing is known as to the way in which logic was treated in the *Dṛṣṭivāda*.

34 Samaṇassa ṇaṁ bhagavao Mahāvīrassa cattārisayā vādīṇam sadeva-maṇuyāsurate parisāte aparājiyāṇam ukkositā vātisaṁpayā hutthā—*Sth. Sū.* 382. See also *Kalpa-sūtra*, 143 etc.

35 nava ṇeuṇitā vatthu paṁ∘ taṁ∘ saṅkhāṇe nimitte kātite porāṇe pārihatthite parapaṇḍite vātite bhūtikamme tigicchate—*Sth. Sū.* 679.

36 See *Bṛhatkalpasūtrabhāṣya*, 6035 ff.

37 See *Bṛhatkalpabhāṣya*, 5425 ff.

38 Ibid, 5691, 5697 etc.

39 *Arthasya lakṣmyāḥ kathā—upāyapratipādanaparo vākya-prabandho'-rthakāthā*—Abhayadeva's commentary on *Sth. Su.* 189.

40 Dhammakahā paṁo taṁo akkhevaṇī vikkhevaṇī saṁvegaṇī nivvegaṇī; akkhevaṇī kahā cauvvihā paṁotaṁo āyāra-akkhevaṇī vavahāra-akkhevaṇī pannatti-akkhevaṇī diṭṭhivāta-akkhevaṇī; vikkevaṇī kahā cauvvihā paṁotaṁo sasasamayaṁ kahei, sasamayaṁ kahittā parasamayaṁ kahei(1). parasamayaṁ kahettā sasamayaṁ ṭhāvavittā bhavati (2), sammāvātaṁ kahei sammāvātaṁ kahettā micchāvātaṁ kahei(3), micchāvātaṁ kahettā sammāvātaṁ ṭhāvatittā bhavati (4); saṁvegaṇī kahā cauvvihā paṁo taṁo ihaloga-saṁvegaṇī, paralogassaṁvegaṇī, ātasarīra-saṁvegaṇī, para-sarīra-saṁvegaṇī, nivvegaṇī kahā cauvvihā paṁotaṁo ihaloge duccinnā kammā ihaloge duhaphalavivāgasaṁjuttā bhavanti (1), ihaloge duccinnā kammā paraloge duhaphala-vivāgasaṁjuttā bhavanti (2), paraloge duccinnā kammā ihaloge duhaphalavivāga-saṁjuttā bhavanti (3), paraloge duccinnā kammā paraloge duhaphala-vivāgasaṁjuttā bhavanti (4), ihaloge succinnā kammā ihaloge suhaphala-vivāgasaṁjuttā bhavanti, ihaloge succinnā kammā paraloge suhaphalavivāgasaṁjuttā bhavanti; evaṁ caubhaṅgo—*Sth Sū*. 282. See also Abhayadeva-sūri's commentary.

41 See chapter on 'Types of Debate'.

42 See the chapter on ' Dialectics in the *Caraka-Saṁhitā* '.

43 See *Caraka Saṁhitā*, *Vimānasthāna*. 8.25.

44 The commentator gives alternative explanations of (5–7) so he does not seem to be sure about their meaning.

45 Compare '*kiṁ nu khalu asty akālamṛtyuḥ uta nāstīti—66*,
CS, *Vimānasthāna*, 8.43.

46 "Sarisavā te bhante kiṁ bhakkheyā abhakkheyā?"
"Somila! sarisavā bhakkheyā vi abhakkheyā vi."
"Se keṇatthaṁ bhante evaṁ vuccai—sarisavā me bhakkheyā vi abhakkheyā vi?"
"Se nūṇaṁ te Somilā! bambhannaesu naesu duvihā sarisavā pannattā taṁo jahā mittasarisavā ya dhanna-sarisavā ya. tattha ṇaṁ je te mitta-sarisavā....te ṇaṁ samaṇāṇaṁ niggaṁthāṇaṁ abhakkheyā, tattha ṇaṁ je te dhanna-sarisavā......aṇesaṇijjā te samaṇāṇaṁ niggāṁthāṇaṁ abhakkheyā,..tattha ṇaṁ je te jātiyā......laddhā te ṇaṁ samaṇāṇaṁ niggaṁthāṇaṁ bhakkheyā,..—*Bhagavatī Sūtra*, 18.10.

47 See also *Daśavai. Nir*. 52ff.

48 Savvabhicāraṁ hetuṁ sahasā vottuṁ tam eva annehiṁ,
uvavūhai sappasaraṁ sāmatthaṁ ca'ppaṇo nāuṁ.
—*Daśavai. Nir.*, 68.

49 Parables are given to explain each of the terms in the *Daśavaikālika Niryukti*, *Curni* and Haribhadra's comm. on the *Daśavai. Nir.* and Abhayadeva's comm. on the *Sthānāṅga Sūtra*, 338.

50 Jiṇavayaṇaṁ siddhaṁ ceva bhaṇṇae katthaī udāharaṇaṁ,
āsajja u soyāraṁ heū'vi kahiṁ ci bhaṇṇejjā 49.
katthai paṁcāvayavaṁ dasahā vā savvahā na paḍisiddhaṁ.
na ya puṇa savvaṁ bhaṇṇai haṁdı saviāraṁ akkhāyaṁ. 50
—*Daśavai. Nir.* 49-50.

dhammo guṇā ahiṁsāiyā u te paramaṅgala painnā,
devāvi logapujjā paṇamanti sudhammam ii heu.
diṭṭhanto arahantā aṇagārā yā bahavo u jinasīsā,
vattaṇuvatte najjai jaṁ naravaiṇo'vi paṇamanti.
uvasaṁhāro devā jaha taha rāyāvi paṇamai sudhammaṁ.
taṁhā dhammo maṅgalam ukkiṭṭham ii a nigamaṇaṁ.
—Ibid, 89-91.

The two sets of ten *avayavas* are mentioned in *Gāthās* 92 ff, 137 ff.

51 See Bhoja's *Śṛṅgāra Prakāśa*, Vol. I, Part 2, pp. 218-219—V. Raghavan (Karnataka Publishing House, Bombay).

Pt. Dalsukhbhai Malavania has discussed the logical and dialectical categories found in early scriptural and philosophical works in his learned Introduction to the Nyāyāvatāra-vārttika-vṛtti (S.J.G.). I am very much indebted to his exposition.

CHAPTER II

DIALECTIC IN THE *CARAKA SAṀHITĀ*

In the last chapter of the *Arthaśāstra*, attributed to Kauṭilya (4th cent. B.C.), there is a list of thirty-two technical terms called *tantrayukti* (method of treatment, maxims for the interpretation of textual topics). This list appears also in the *Caraka Saṁhitā* (1st cent. A.D.) (thirty-six terms—*Siddhisthāna* Ch. XII) and in the *Suśruta-Saṁhitā* of Suśruta (6th or 7th cent. B.C.), (thirty-two terms—*Uttaratantra*, Ch. LXV), two authoritative works on Medicine. This was a later addition to the original works, by Dṛḍhabala (9th cent. A.D.) and Nāgārjuna (4th or 5th cent. A.D.) respectively and it can quite reasonably be said that the list was not prepared either by Kauṭilya or by the authors of the two works on Medicine, but by a person or persons who wanted to lay down the methods of treatment and even discourse on a scientific basis, and to apply them in the fields of economics, politics and human ailments. The redactor (Nāgārjūna) of the *Suśruta Saṁhitā* says that he has collected these *tantrayuktis* as general principles of textual understanding, and he regards them as *śabdanyāyārtha*. In the *Suśruta Saṁhitā* it is clearly stated that by means of the *tantrayukti*, a (physician-) debater can establish his own points and set aside those of his critics who indulge in unfair or unsound statements (*asadvādiprayuktānāṁ vākyānāṁ pratiṣedhanaṁ, svavākyasiddhir api ca kriyate tantrayuktitaḥ.—Uttaratantra* 65.5). It can be said that the section on *tantrayukti* is the first known manual concerned with the systematisation of the maxims of interpretation, etc. and consequently of discourse or debating.

The technical terms called *tantrayukti* (as given in the *Suśruta Saṁhitā*) are (1) *adhikaraṇa* (topic of discourse), (2) *yoga* (right combination of words even though they be separated), (3) *padārtha* (fixing the meaning of a word, having different meanings, according to context), (4) *hetvartha* (illustrating the condition of unknown things by perceived and known examples), (5) *uddeśa* (enunciation, briefly referring to a subject without going into details), (6) *nirdeśa* (detailed description), (7) *upadeśa* (general instruction), (8) *apadeśa* (showing a reason), (9) *pradeśa* (analogy—solving the present difficulty on the analogy of a past difficulty), (10) *atideśa* (anticipating a future event from a present indication), (11) *apavarga* (exception), (12) *vākyaśeṣa* (supplementing an idea from the context), (13) *arthāpatti* (implication), (14) *viparyaya* (contrary assertion), (15) *prasaṅga* (allusion to things repeatedly described in another chapter), (16) *ekānta* (unexceptionable affirmation), (17) *anekānta* (understanding that different views prevail on a particular subject), (18) *pūrva-pakṣa*, (19) *nirṇaya* (discussion of a matter in the form of question and answer), (20) *anumata* (referring to another view without challenging it, that is to say, implicitly approving of it), (21) *vidhāna* (arrangement according to the previously fixed order), (22) *anāgatāvekṣaṇa* (anticipating certain things which are to be described at a later stage), (23) *atikrāntāvekṣaṇa* (alluding to things described before), (24) *saṁśaya* (statement likely to create doubt or confusion), (25) *vyākhyāna* (elaborate description), (26) *sva-saṁjñā* (one's own technical use of a term), (27) *nirvacana* (definition or etymological explanation), (28) *nidarśana* (giving an illustration), (29) *niyoga* (direction), (30) *samuccaya* (taking two or more things together), (31) *vikalpa* (giving alternative or optional directions), (32) *ūhya* (understanding obvious things from the context).[1]

In the *Caraka Saṁhitā*, the *tantrayukti*, which consists of thirty-six terms, includes besides these *prayojana* (purpose), *pratyutsāra* (refutation), *uddhāra* (supporting or defending one's own view), *sambhava* (possibility).[2] The *tantrayukti* in

Kauṭilya's *Arthaśāstra* consists of thirty-two terms which are the same as in the *Suśruta Saṁhitā* with this difference that *anekānta* is absent and we have *upamāna* as an additional factor, the meaning of the latter being similar to *hetvartha* as given in the *Suśruta Saṁhitā*—*hetvartha* in the *Arthaśāstra* meaning 'a reason establishing what is to be proved'. The term '*uttarapakṣa* is used instead of '*nirṇaya*'[3] Vātsyāyana refers to the *tantrayukti* in his *Bhāṣya* on the *Nyāya-sūtra*.[4] The parallelism of the *tantrayuktis* with terms connected with dialectics is noteworthy.

It can be seen that of these *tantrayuktis* some are ways of interpreting ideas, others are ways of interpreting the arrangement of textual words and their connections, while still others are just descriptions of specific peculiarites of style. It is said that these maxims are like the sun to a bed of lotuses, or like a lamp to a house, for the illumination of the subject of discourse.

(*yathāmbuja-vanasyārkaḥ pradīpaḥ veśmane yathā,*
prabodhasya prakāśārthas tathā tantrasya yuktayaḥ.
—*Suśruta Saṁhitā, Uttaratantra,* 65·7).

The fact that an exposition is given of the *tantrayukti* in works on medicine and politics besides those on logic is sufficient evidence to show that it was concerned with the interpretation of textual topics and with the methods of debating as applicable to all sciences *

* See Dr. Gerhard Oberhammer's article—' *Notes on the Tantrayuktis*'—Adyar Library Bulletin, Vol. 31-32 (1967-68). According to Dr. Oberhammer, the *tantrayuktis* are rules for the composition of a scientific work (*tantra*); they constitute an analysis of the formal elements which gave form to a scientific work (*tantra*). "With regard to its purpose and awareness of the problems, the doctrine of the *tantrayuktis* does not essentially differ from the presentations of the *vāda* doctrine. Only a difference in the subject-matter—on the one hand we have the spoken language of the debate, and on the other hand, the written composition of a scientific work—causes the difference of the topics dealt with. The *tantrayuktis*, again similar to the *vāda*-doctrines, had their influence on later times, without which the written, scientific style of the classical period in India would be hard to understand.

The parallelism of the *tantrayuktis* and the *vāda*-doctrine shows itself not only with regard to the problems and the approach to them, but also in the fact that certain terms appear in both traditions."
—Ibid, p. 603.

What is even more relevant, in the *Caraka Saṁhitā* in the *Vimānasthāna*, 8, modes of learning and teaching are recommended. In this connection we find an exhortation of *saṁbhāṣā-vidhi* or the method of debate or discussion. If a person carries on a discussion with another person versed in the same department of knowledge, that strengthens the habit of close application to their subject and gives rise to the sense of competition or rivalry, and also bestows upon them proficiency and eloquence and brightens their reputation. If there is any doubt with regard to a topic already studied this discussion dispels it; and if there is no such doubt, a person gains greater confidence with regard to his subject by discussing it with a fellow-scholar. Such a discussion also acquaints debaters with certain matters unknown to them. Moreover, some cherished secrets which a preceptor has imparted to his favourite pupil are disclosed in substance by the pupil in the heat of excitement on account of his desire to emerge victorious in the debate or controversy. Hence wise men are all praise for a debate or discussion with scholars versed in the same department of knowledge.[5]

It can be seen from this what a live thing a debate was in ancient times and what excitement it could rouse in the minds of the debaters and the audience. In the anxiety to win, a clue was given at times to undisclosed facts which were the secret of one's success or reputation.

A debate with a fellow-scholar may be carried on (*i*) in a spirit of co-operation *(sandhyāya)*, when it is called *sandhāya*-or *anuloma-saṁbhāṣā*, friendly or congenial or genuine debate; or *(ii)* in a spirit of opposition, when it is called *vigṛhya saṁbhāṣā* (hostile debate). The congenial debate takes place when the other party is possessed of learning, specialised knowledge, capacity to discuss, is not easily irritable; is one whose learning is not bombastic, is not malicious, can be reasonably persuaded, that is to say, is not dogmatic in views; is well-versed in the art of persuasion, is tenacious and fond of discussion. In debating with such a person one should speak

confidently, ask questions with confidence, and explain things clearly to him, who also would ask questions confidently. One should not be afraid of suffering defeat from him, should not rejoice in inflicting defeat on him or boast about it in the presence of others. One should not be obstinate in sticking to one extreme view due to ignorance, or keep on referring to subjects of which the other party is ignorant. One should use the right kind of persuasion with him and be very attentive and careful in this respect. This kind of debate is called agreeable or genuine debate *(anuloma saṁbhāṣā)*.[6]

But if one has to enter into a hostile debate with any one, one should examine one's own relative strength and the relative merit of the opponent, as also the character of the assembly. Such a careful examination should determine for the wise man the opportuneness or otherwise of entering into the debate. The merits considered as good in a debater or disputer (*jalpaka*), are learning, specialised knowledge, retentive grasp (*dhāraṇā*), genius and eloquence. His demerits are irritability, lack of proficiency, shyness or timidity, lack of retention of the grasp or of retentive grasp and inattentiveness. One must compare one's own merits or otherwise with those of the other party *(para)*.[7]

The *para* (other party) may be of three kinds—superior *(pravara)*, inferior (*pratyavara*) and equal *(sama)* in point of these merits, but not in all respects.[8] The assembly (*pariṣad*) in which a debate takes place may be of two kinds—learned (*jñānavatī*) and ignorant (*mūḍhā*). Each of these may again be friendly (*suhṛd*), neutral or indifferent (*udāsīna*), and hostile or committed to one side (*pratiniviṣṭa*). It is not advisable to enter into an argument in a hostile assembly, whether learned or ignorant. In an ignorant assembly, whether friendly or indifferent, one may enter into a debate, even without possessing learning, specialised knowledge and eloquence, with a person who is not much known and is despised by respectable persons. In debating with such a person one should employ involved (*āviddha*), long-strung periods (*vākya-daṇḍaka*). Now assuming a delighted countenance and now indulging in

ridiculing the opponent, one should engage the assembly in such a way as to leave the opponent no opportunity to speak. If he uses an unusual word he should be told that his words convey no meaning, or that he has lost his proposition (*hīnā te pratijñā iti*). If at all he challenges or invites you for argument again, he should be snubbed by saying, 'Go and study for a full year,' 'You do not seem to have studied under a preceptor', or 'This much that you have done today is enough.' If the opponent has been declared defeated once, he is defeated and one should not have anything to do with him (—should not refute his thesis again by adducing a reason in refutation of it). Some hold that this procedure may be adopted even in a debate with a superior opponent, but experts do not approve of this procedure when the opponent happens to be a superior person.

In a friendly assembly, one may enter into a debate with an opponent who is inferior or equal. While speaking in an indifferent assembly endowed with attentiveness, knowledge of the scriptures, learning, specialised knowledge, retentive grasp and eloquence, one should be very alert and note the relative merits or demerits of one's opponent. In whatever point one feels that the opponent is superior, one should not enter into a debate in respect of that so that one's weakness is not disclosed; but where one finds the opponent to be weaker, one should quickly defeat him. These are the ways of inflicting quick defeat upon inferior opponents. If the opponent is weak in the scriptures, he should be overpowered by long citations from the scriptures; if he is not very learned, he should be defeated by the use of sentences containing unusual words. An opponent whose memory is not retentive should be defeated by the use of involved, long-strung sentences or periods. An opponent devoid of genius should be defeated through the use of the same word bearing different meanings. An opponent devoid of eloquence should be defeated by a scornful imitation of his half-uttered sentences; an opponent who is nervous, or who has not faced an

assembly should be defeated by putting him to shame on that account. An opponent of irritable temper should be defeated by throwing him into a state of nervous exhaustion by repeatedly angering him. An opponent who is timid should be defeated by frightening him away. An opponent who is inattentive should be defeated by checking him under a certain rule. These devices may be employed in order to defeat an inferior opponent quickly.

It is however recommended that even in a hostile debate one should speak with propriety and not hamper a reasonable stand. A note of warning is sounded that tempers should not be excessively excited for in such a state a person loses all sense of discrimination in respect of action and speech. Experts, therefore, do not approve of a quarrel in the assembly of the good.

These are the instructions meant to be observed after the debate has started. But even before the debate commences, one should, taking the assembly into one's confidence, cause it to name that subject of debate with which one is perfectly familiar, or which would present great difficulty to the opponent, or present the view of the opponent in an unfavourable light. When the assembly meets, one should observe silence after saying, "Now we cannot make any suggestions; this assembly alone will fix the subject of debate and the limits or rules of debate as it wills and as it deems fit." The limits or rules of debate consist in such directions as "This should be said, this cannot be said; if this occurs, defeat follows".[9]

The *Caraka Saṁhitā* gives a lucid classification and a lively picture of debates, assemblies, kinds of debaters, and recommends practical devices for the defeat of the opponent, of course an inferior or an equal one, especially when the assembly is ignorant and at the same time friendly or indifferent. We get here a picture of what the debating assemblies actually were like, and these are really descriptions rather than directions to be made use of. We are reminded of the practice

of lawyers in courts of law, when they indulge more in confuting each other than in arguing with propriety. Nevertheless, the merits of a congenial or genuine debate or discussion are applauded in the *Caraka Saṁhitā*, and the devices or tricks of debate are said to be permissible only in a hostile debate wherein also the merits of the disputing parties are properly estimated. The tricks—rather mean at times—are to be employed only for quick victory over a weak rival, especially in an ignorant assembly.

The *Caraka Saṁhitā* goes on to recommend the knowledge of the following topics for a thorough grasp of the course of debate for physicans :[10]

(1) *Vāda*—debate. Here by *vāda* is meant 'hostile debate'. It is a debate between two parties keeping in view a department of knowledge (—that is to say, it is not a quarrel for the sake of wealth, etc.), and in a spirit of opposition. It is of two kinds : (*i*) *jalpa* (disputation) which is meant for defending each one's own position, e.g. 'There is rebirth', and condemning that of the opponent, e.g. 'There is no rebirth', by means of reasoning set forth by the two parties; (*ii*) *vitaṇḍā* (wrangling), which is only for the purpose of condemning the opponent's view without accepting any position of one's own.[11]

(2) *Dravya* (substance), (3) *Guṇa* (attribute), (4) *Karma* (action), (5) *Sāmānya* (universal), (6) *Viśeṣa* (particularity), (7) *Samavāya* (relation of inherence) —all these being categories of the Vaiśeṣika system which are acceptable to the science of Medicine.

(8) *Pratijñā* (proposition), the enunciation of a thesis which is sought to be proved (*sādhya-vacanam*). (Compare *sādhya-nirdeśaḥ pratijñā*–NS. I. 1.33).

(9) *Sthāpanā*, the establishing of a thesis by syllogistic reasoning involving proposition along with reason, illustration, application and conclusion (*sthāpanā nāma tasyā eva pratijñāyā hetudṛṣṭāntopanayanigamanaiḥ sthāpanā*);

(10) *Pratiṣṭhāpanā*, the establishing of a proposition contrary to the proposition put forth by the other party, e.g. 'The soul is non-eternal (*pratijñā*), because it is cognised by the sense-organs (*hetu*); like a pot, which being cognised by the sense-organs, is non-eternal (*dṛṣṭānta*); the soul is, like a pot cognised by the sense-organs (*upanaya*); therefore the soul is non-eternal (*nigamana*).

(11) *Hetu*, the source of knowledge (*upalabdhi-kāraṇam*) such as perception, inference, tradition or verbal testimony (*aitihya*), analogy (*aupamya*). It may be noted that the word '*hetu*' signified in early works—Brāhmaṇical and Jaina—a source of valid knowledge, though the other meaning 'reason' was not unknown. Dasgupta says that Caraka's definition of *hetu* does not really come into conflict with that of Gautama; he only says that a *hetu* may be discovered by any of the *pramāṇas* and by whichever *pramāṇa* it may be discovered it may be called a *hetu* if it is invariably associated with the sādhya (probandum).[12]

(12) *Dṛṣṭānta* (illustration), the thing about which the simpletons and the learned (i.e. the ordinary man and the expert) hold the same opinion, and which describes the subject; e.g. hot like fire; the *Sāṁkhya* statement is as illuminating as the Sun. [*dṛṣṭānto nāma yatra mūrkhaviduṣāṁ buddhi-sāmyaṁ, yo varṇyaṁ varṇayati*–CS, p.267 (34). Compare '*laukika-parīkṣakāṇāṁ yasminnarthe buddhi-sāmyaṁ sa dṛṣṭāntaḥ* —NS. 1.1.25].

(13) *Upanaya* (application), (14) *Nigamana* (conclusion),

(15) *Uttara* (rejoinder), a reply based on dissimilarity to an argument based on similarity and vice verse, This corresponds to *jāti* of the Nyāya school [uttaraṁ *nāma sādharmyopadiṣṭe hetau vaidharmya-vacanam, vaidharmyopadiṣṭe vā hetau sādharmya-vacanam*–CS, 267 (34). Compare *sādharmya-vaidharmyābhyāṁ pratyavasthānaṁ jātiḥ.*—NS. 1.2.18]. The long list of *jātis* given in the *Nyāya-sūtra* is not referred to in the *Caraka*–

Saṁhitā; nor does the technical term *jāti* occur in it. If these were known to the author of the *Caraka Saṁhitā*, it is unlikely that he should have passed them over without as much as referring to them.

(16) *Siddhānta* (tenet or conclusion), a conclusion which is arrived at after a searching inquiry by experts and demonstration by proper reasons. It is four-fold—(*a*) *sarvatantra—siddhānta* (tenet acceptable to all schools of thought); (*b*) *prati-tantra - siddhānta* (conclusion peculiar to each book or thinker or school of thought), (*c*) *adhikaraṇa-siddhānta* (conclusions which being proved or accepted, other conclusions also become proved or accepted); (d) *abhyupagama-siddhānta* (hypothesis accepted only for the sake of argument but neither examined critically nor proved) [*siddhānto nāma sa yaḥ parīkṣakair bahuvidhaṁ parīkṣya hetubhiś ca sādhayitvā sthāpyate nirṇayaḥ*.-CS, p. 268 (37). Compare NS. I.1.26-31].

(17) *Śabda* (word) is a combination of letters. It is of four kinds—that which refers to a matter which can be perceived, that which refers to a matter that cannot be seen (e.g 'There is rebirth'), that which is true, and that which is false [*Śabdo nāma varṇasamāmnāyaḥ, sa caturvidhaḥ–dṛṣṭārthaś ca, adṛṣṭārthaś ca, satyaś ca, anṛtaś ceti.*—CS,p. 268 (38)].

(18) *Pratyakṣa* (perception),

(19) *Anumāna* (inference),

(20) *Aitihya* (verbal testimony),

(21) *Aupamya* (analogy), the knowledge of a thing acquired through its similarity to another thing [*Aupamyaṁ nāma yad anyenānyasya sādṛśyam adhikṛtya prakāśanam.*—CS. p. 268 (42). Compare '*prasiddha-sādharmyāt sādhyasādhanam upamānam.*—NS.1.1.6].

(22) *Saṁśaya* (doubt), uncertainty because there is some proof on either side, e.g. Is there or is there not untimely death?

(23) *Prayojana* (purpose), that for achieving which actions are undertaken.

(24) *Savyabhicāra* (inconclusiveness); e.g. This may or may not be a medicine for this disease. It may be noted that the Nyāya term for a fallacy of probans has been given here a more general interpretation. *Savyabhicāra* gives rise to *saṁśaya*, and so should not be confounded with it.

(25) *Jijñāsā* (inquiry or experimenting, *parīkṣā*).–A medicine is to be prescribed after proper experimentation.

(26) *Vyavasāya*, ascertainment or determination (*niścaya*), e.g. that a particular disease is due to the disturbance of wind and this is its medicine.

(27) *Arthaprāpti* (presumptive implication, same as *arthāpatti*), the knowledge of a thing implied by the declaration of another thing; for instance, when one says that a person should not eat during the day, it is implied that he can eat during the night; or the statement, " This disease cannot be cured by allowing the patient to take his usual food and drink," implies that it can be cured by fasting.

(28) *Saṁbhava* (originating cause), that from which something arises; for instance, the six *dhātus* (constituents) are the originating cause of the foetus, wrong diet is the *sambhava* of disease; right course of treatment, of health. *

(29) *Anuyojya* (censurable), a statement which is defective or faulty; or a statement is faulty if a person makes a general statement when a particular one is required; that is to say, an answer omitting such details as should have been given. For instance, the answer, 'This disease can be cured by purificatory treatment ' is faulty as it does not state whether the purification should be done through vomiting or purging.

(30) *Ananuyojya* (non-censurable), the reverse of the censurable.[13]

(31) *Anuyoga* (interrogation), an inquiry about a subject made by a person only of another who has studied the same

* Compare *saṁbhava* as a *pramāṇa* signifying inclusion; for instance, a *droṇa* is contained in a *khārī*.

vidyā (department of knowledge), about a particular school of thought or one aspect of it, in order to test his scholarship or eloquence For instance, when a person asserts that the soul is eternal, his fellow-scholar inquires, 'What is the reason ?' This inquiry is called *anuyoga.*

(32) *Pratyanuyoga* (counter-question), for instance, 'What is the reason for your asking such a question) ?'

(33) *Vākyadoṣa* (defects of statement) comprising (*i*) *nyūna* (deficiency, omission), a fault in which any of the members of the syllogism is omitted; or only one reason is put forth for proving something in respect of which a number of reasons are required to be adduced in view of a statement that all would be set forth; (*ii*) *adhika* (redundance)—(*a*) the reverse of *nyūna*, using more factors of reasoning than are necessary; or (*b*) irrelevancy, for instance, when a person talks irrelevantly of the tenets of *Bṛhaspati* or *Uśanas* when the subject under consideration is *Āyurveda*; or (*c*) repetition: when a person repeats an expression or its sense—though different words may be used—several times, though it may be relevant. (*iii*) *anarthaka* (meaninglessness)—consisting of a mere grouping of letters without any sense being conveyed, e.g. *k, kh, g, gh, ṅ,* etc. (*iv*) *apārthaka* (incoherence)—a grouping of words which does not convey any meaning, e.g. wheel whey race thunderbolt moon...(*v*) *viruddha* (contrary statement)—making a statement which is contrary to the example (—e.g. cold water is hot, for so is fever), or to the accepted conclusion (—e.g. when a medical man says—Medicine does not cure diseases), or to the convention or accepted conclusion of any particular *Śāstra* (e.g. when a Mīmāṁsaka says that animals should not be sacrificed).[14]

It may be noted that these are mentioned as *nigraha-sthānas* (grounds of censure or defeat) in the *Nyāya-sūtra*, 5.2. Of the varieties of *adhika* given in the *Caraka Saṁhitā*, (*a*) alone is regarded as *adhika* in the *Nyāya-sūtra;* the others are given separately as *nigrahasthānas*, viz. *arthāntara*, *punar-*

ukta. *Viruddha* would be covered by the fallacy of reasoning, *viruddha* (—whether it be of *pakṣa* or thesis or example—) and by the *nigrahasthāna apasiddhānta*.

(34) *Vākya-praśaṁsā* (excellence of expression)—when a statement is free from the faults mentioned above and consists of well-expressive words it is applauded as unexceptionable.[15]

(35) *Chala* (quibble)—speech consisting of just words which are deceptive, and appearing to have sense but really meaningless. It is of two kinds— (*i*) *vākchala* (verbal quibble); for instance, when a person uses the word '*navatantra*' to mean 'one who has newly studied a science' and is taken by another to mean 'a man who has studied nine text-books' or 'a man who has revised the text-book nine times'; (*ii*) *sāmānya-chala* (generalising quibble); for instance; when a man says, "Medicine cures diseases", another says, "You said that an existent entity cures another existent entity; and the disease is existent, so the existent medicine should cure the existent disease. Now bronchitis and tuberculosis are both 'existent', so bronchitis should cure tuberculosis."[16]

The *Nyāya-sūtra* (1.2.10–17) mentions an additional variety of *chala*, called *upacāra-chala* (figurative quibble), e.g. 'Cradles are crying', meaning babies in the cradle are crying. It takes note of a view according to which only two kinds of *chala* are recognised, *vāk-chala* and *upacāra-chala* being regarded as identical. Could this be the tradition to which the author of the *Caraka Saṁhitā* also belonged ?

(36) *Ahetu* (non-reason or fallacious reason)—It is of three kinds—(*a*) *prakaraṇasama* (begging the question), which occurs when that which is yet to be proved is given as the reason; for instance, "The soul is eternal because it is different from the body; the body is non-eternal, and the soul being different from the body must be eternal." Here the opponent can point out a fallacy that the *hetu* or reason, 'the soul is different from the body'—has yet to be proved. As the proposition to be proved is "The soul which is different from the body is eternal",—the soul's difference from the

body and its eternality are both to be established, and the subject (*pakṣa*) itself cannot be the probans. It may be noted that this *prakaraṇasama* is different from the *prakaraṇasama* of the *Nyāya-sūtra* (1.2.7); it is comparable to the *sādhyasama* of the *Nyāya-sūtra* (1.2.8). (*b*) *saṁśayasama* (assumption based on doubt), occurring when that which is the cause of doubt is offered as the *hetu* dispelling the doubt. For instance, there is a doubt whether a person who has quoted a portion of a text-book of Medicine is a physician. On this doubt being raised, if another person argues, "This person is a physician because he has quoted a portion of a text-book of Medicine," and does not set forth any qualifying statement which could specifically remove the doubt, – this argument involves the fallacy of probans called *saṁśayasama*. The *Nyāya-sūtra* speaks of *saṁśayasama* as an instance of *jāti* (futile rejoinder) (NS.5.1.14), but it is a case where a doubt is not removed because of the fact that the thing about which something is affirmed possesses two such qualities as lead to opposite conclusions, so that no affirmation can be made on the strength of either of these characteristics. Here, however, *saṁśayasama* is used in the sense that what is itself the source of doubt is adduced for its removal. (*c*) *varṇyasama* (balancing the subject)—occurring where the illustration is such that in it the subsistence of the probandum or the attribute to be proved is as questionable as in the case of the subject (*pakṣa*). For instance, " Intellect is non-eternal, because it is intangible, like sound."—Here the non-eternality of sound is as quesionable as is that of the soul.[17]

(37) *Atītakāla* (mistimed)—a fallacy which arises when that which should be stated first is stated afterwards; for instance, when the order of the members of the syllogism is changed, or when a *nigrahasthāna* (ground of defeat) is not exposed at the proper time. In either case the mistimed statement is ineffectual.[18] This is comparable to the *nigrahasthāna aprāptakāla* of the Naiyāyikas (See NS. 5.2.11 and commentaries on it). The fallacy of reason *kālātīta* in the *Nyāya-sūtra,* 1.2.9 is quite different in character.

(38) *Upālambha,* finding fault with the reason adduced, as pointed out under '*ahetu*'.[19]

(39) *Parihāra* (rebuttal of criticism), giving a reply to the flaw pointed out by the opponent. For instance, "When the soul resides in the body the signs of life can be noticed, but when the soul leaves the body these signs are no longer noticed. Hence the soul is distinct from the body and therefore eternal."—This answers the flaw pointed out under *prakaraṇa-sama.*[20] The mode of *parihāra* is taught in the *Nyāya-sūtra* also in connection with *jātis* (futile rejoinders).

(40) *Pratijñāhāni* (renouncing the proposition), which occurs when a debater being attacked abandons the proposition first set forth by him. For instance, a person first advances a proposition, viz. 'Soul is eternal', and then on being attacked by an opponent, abandons it by saying, 'Soul is non-eternal.'[21] This corresponds to *pratijñā-sannyāsa* of the *Nyāya-sūtra* (5.2.5), rather than to its *pratijñā-hāni* (violating the proposition) (NS.5.2.2).

(41) *Abhyanujñā* (admittance), the acceptance by a person of what is attributed to him by the opponent, whether agreeable or disagreeable. Here a debater instead of refuting the charge brought against him, charges his opponent with the same defect. For instance, a person says to another, "You are a thief"; if the latter says, "You too are a thief", he admits what the former had said about him.[22] This is the same as the *matānujñā* of the *Nyāya-sūtra* (5.2.20).

(42) *Hetvantara* (wrong reason), which occurs when one instead of advancing the proper reason adduces a wrong one (*hetvantaraṁ nāma prakṛtahetau vācye yad vikṛtahetum āha,*— CS, p. 272, (63). Dasgupta interprets as follows :- *Hetvantara* (dodging with a wrong reason) is where when the cause of some root-fact (*prakṛti*) is asked, the reply refers to the cause of the modifications or manifestations (*vikṛti*) of that root-fact.[23] This is different from the *nigrahasthāna hetvantara* of the *Nyāya-sūtra* (5.2.6) wherein the probans in the unqualified form having been opposed, the debater desires to qualify it.

(43) *Arthāntara* (shifting the topic, or irrelevant statement), for instance, a person cites the symptoms of gonorrhoea when he is supposed to cite those of fever.[24] Compare *arthāntara* of *Nyāya-sūtra* (5.2.7).

(44) *Nigrahasthāna* (ground of defeat)—It consists in the inability to apprehend something repeated thrice in an assembly, the members of which have understood it. (Same as *ajñāna*, NS. 5.2.17). It may also occur when one finds fault with what is unexceptionable (—same as *niranuyojyānuyoga-NS.* 5.2.22), or fails to detect a flaw where there is one (—same as *paryanuyojyopekṣaṇa-NS.* 5.2.21). The *Caraka Saṁhitā* then makes it clear that *pratijñā-hāni, abhyanujñā, kālātītavacana, ahetu, nyūna, adhika, vyartha* (=*apārthaka* ?), *anarthaka, punarukta, viruddha, hetvantara, arthāntara* are all *nigrahasthānas.*

The *Caraka Saṁhitā* recommends that the discussic among physicians should pertain only to topics of the scie of medicine. Different problems have been discussed in the various sections. One should keep these in view and say nothing which is irrelevant, unscientific (not in agreement with the science), which is not examined, which cannot establish the position, which is confused, and which is not comprehensive. All statements should be supported by reasons. All controversies which are equipped with reasoning, which are not foul or confused are helpful to diagnosis because they enhance the admirable intellect, and the intellect if unobstructed brings success to all undertakings.[26]

Here an interesting question arises as to how far this detailed description of the various aspects and devices of debate and discussion is necessary for a proper diagnosis of a disease? In an indirect way, of course, every detail can be correlated to the main topic * or to the main purpose of arriving at a decision, but in practice many of these details

* We can, for instance, find some justification, if we want to, for the history of *nāda* from the origin of the world onwards, as found in the *Saṅgitaratnākara.*

would not be used. It therefore appears that the whole section on debate and discussion might have been incorporated in the *Caraka Saṁhitā* from some work or tradition whose main purpose might have been teaching persons the art of debate and discussion. Rather, it seems odd that the diagnosis of a disease should be discussed in a public assembly, though it is likely that in the case of important persons when several doctors meet and differ in their diagnosis, some sort of discussion and debate would ensue; or theoretical problems would be discussed in the conferences of physicians.

It can be seen that the devices of debate were sufficiently developed and well known in the time of the *Caraka Saṁhitā* which dwells at length on the merits of debates and discussions. This work uses the term *anuloma saṁbhāṣa* for a friendly debate or what the *Nyāya-sūtra* would call *vāda* meant for arriving at the truth and acquiring newer knowledge. *Vāda* in the *Caraka Saṁhitā* usually stands for *vigṛhya saṁbhāṣa* or hostile debate of the type of *jalpa* or *vitaṇḍā*[4] wherein free and clever use is made of *jātis* and *nigraha-sthānas*. The list of topics recommended for a thorough grasp of the course of debate finds its parallel in some form or other in the *Nyāya-sūtra*. It is quite likely that the *Caraka Saṁhitā* was an adherent of a different tradition in this respect from that to which the *Nyāya-sūtra* itself belonged. This can be seen from the classification of *chala*, the different interpretations of certain technical terms, and the like.

NOTES

1 See *Suśruta Saṁhitā*, *Uttaratantra*, Ch 65 (pp.814–819) (NSP, 1938); and HIP, Vol, II, pp. 389–392, by S. N. Dasgupta.

2 See *Caraka Saṁhitā*, *Siddhisthāna*, 12, 41–45ab and Cakrapāṇidatta's *Āyurveda Dipikā* on these stanzas (NSP, 1941, pp. 736–737).

3 See *Arthaśāstra*, XV, pp. 280–283 (Bombay University).

4 See NB. 1. 1. 4.

5 Saṁbhāṣa-vidhim ata ūrdhvaṁ vyākhyāsyāmaḥ—bhiṣag bhiṣajā saha saṁbhāṣeta. tadvidya-saṁbhāṣā hi jñānābhiyoga-saṁharṣakarı bhavati, vaiśāradyam api cābhinirvartayati, vacanaśaktim api cādhatte, yaśaś cābhidīpayati, pūrvaśrute ca saṁdehevataḥ punaḥ śravaṇāc chruta-saṁśayam apakarṣati, śrute cāsamdehavato bhūyo'dhyavasāyam abhi nir vartayati, aśrutam api ca kaṁcid arthaṁ śrotraviṣayam āpādayati, yeca''cāryaḥ śiṣyāya śuśrūṣave prasannaḥ krameṇopadiśati guhyābhimatam arthajātaṁ tat parasparеṇa saha jalpan piṇḍena vijigīṣur āha saṁharṣāt, tasmāt tadvidya-saṁbhāṣām abhipraśaṁsanti kuśalāḥ.—CS. p. 264.

6 Dvividhā tu khalu tadvidyasaṁbhāṣā bhavati-sandhāya sambhāṣā, vigṛhya saṁbhāṣā ca. tatra jñāna-vijñāna-vacana-prativacanaśakti-sampannenā'-kopanenā ' nupaskṛtavidyenā ' nasūyakenā ' nuneyenā 'nunayakovidena ḳleśakṣameṇa priya-saṁbhāṣaṇena ca saha sandhāya sambhāṣā vidhıyate. tathāvidhena saha kathayan visrabdhaḥ kathayet, pṛcched api ca visrabdhaḥ, pṛcchate cāsmai visrabdhāya viśadam arthaṁ brūyāt, na ca nigraha-bhayād udvijeta nigṛhya cainaṁ na hṛṣyet, na ca pareṣu vikattheta, na ca mohād ekānta-grāhī syāt, na cāviditam artham anuvarṇayet, samyak cānunayenānunayet, tatra cāvahitaḥ syāt. ity anuloma-saṁbhāṣāvidhiḥ—Ibid, p. 264.

7 Parīkṣamāṇas tu khalu parāvarāntaram imāñ jalpakaguṇān śreyaskarān doṣavataś ca parıkṣeta samyak; tad yathāśrutaṁ vijñānaṁ dhāraṇaṁ pratibhānaṁ vacanaśaktir iti, etān guṇān śreyaskarān āhuḥ; imān punar doṣavataḥ, tad yathā kopanatvam avaiśāradyam bhīrutvaṁ anavadhāraṇatvam anavahitatvam iti. etān guṇān gurulāghavataḥ parasya caivātmanaś ca tulayet—Ibid, p. 265.

8 Ibid, p. 265 (19) and *Āyurvedadīpikā* on it.

9 See CS, pp. 265-266 (20-26).

10 Imāni tu khalu padāni bhiṣagvādamārgajñānārtham (vl. bhiṣagbhir vādamārga-jñāpanārtham) adhigamyāni bhavanti—CS, p. 266(27).

11 Tatra vādo nāma sa yat pareṇa saha śāstrapūrvakaṁ vigṛhya kathayati. sa ca dvividhaḥ saṅgraheṇa—jalpaḥ, vitaṇḍā ea; tatra pakṣāśritayor vacanaṁ jalpaḥ, jalpa-viparyayo vitaṇḍā. yathā—ekasya pakṣaḥ punar-bhavo'stīti, nāstıty aparasya, tau ca svasvapakṣahetubhiḥ svasvapakṣaṁ sthāpayataḥ parapakṣam udbhāvayataḥ, eṣa jalpaḥ; jalpa-viparyayo vitaṇḍā; vitaṇḍā nāma parapakṣe doṣavacanamātram eva——Ibid, p. 266 (28).

12 See Cakrapāṇi's commentary on CS, p. 267(33); also HIP, Vol. II, p. 380.

13 See CS, p. 269.

14 Atha vākyadoṣah—vākyadoṣo nāma yathā khalv asminnarthe nyūnam adhikam anarthakam apārthakaṁ viruddhaṁ ceti; etāni hy antareṇa na prakṛto'rthaḥ praṇaśyet. tatra nyūnaṁ pratijñā-hetūdāharaṇopanaya-nigamanānām anyatamenāpi nyūnaṁ nyūnaṁ bhavati: yad vā bahūpadiṣṭa-hetukam ekena hetunā sādhyate tac ca nyūnam. athā'dhikam—adhikaṁ nāma yan nyūna-viparītaṁ, yad vā" yurvede bhāṣyamāṇe bārhaspatyam auśanasam anyad vā yat kiñcid apratisambaddhārtham ucyate; yad vā sambaddhārtham api dvir abhidhīyate, tat punaruktadoṣatvād adhikaṁ; tac ca punaruktaṁ dvividham—arthapunaruktaṁ śabdapunaruktaṁ ca. tatrā'rthapunaruktaṁ yathā bheṣajam auṣadham sādhanam iti, śabdapunar-uktaṁ punar bheṣajaṁ bheṣajam iti. athā'pārthakaṁ—apārthakaṁ nāma yad arthavac ca paraspareṇāsaṁyujyamānārthakaṁ, yathā cakra-takra-vaṁśa-vajra-niśākarā iti. atha viruddhaṁ—viruddhaṁ nāma yad dṛṣṭānta-siddhāntasamayair viruddhaṁ; tatra pūrvaṁ drstānta-siddhāntāv uktau; samayaḥ punas tridhā bhavati—yathā āyurvaidikasamayo, yājñikasamayo mokṣaśāstrika-samayaś ceti, tatrāyurvaidikasamayaś catuṣpādam bheṣa-jam iti, yājñikasamaya ālabhyā yajamānaiḥ paśava iti, mokṣa-śāstrika-samayaḥ sarvabhūteṣv ahiṁseti, tatra svasamaya-viparītam ucyamānaṁ viruddhaṁ bhavati. iti vākyadoṣāḥ.—Ibid, p. 270 (54).

15 Vākyapraśaṁsā nāma yathā khalv asminnarthe tv anyūnam anadhikam arthavad anapārthakam aviruddham adhigatapadārthaṁ ceti yat tad vākyam ananuyojyam iti praśasyate.—Ibid. p. 270 (55).

16 Chalaṁ nāma pariśaṭham arthābhāsam anarthakaṁ vāgvastumātram eva. tad dvividhaṁ vākchalaṁ sāmanyachalaṁ ca. tatra vāk-chalaṁ nāma yathā kāścid brūyāt—navatantro'yaṁ bhiṣag iti, atha bhiṣag brūyāt—nāhaṁ navatantra ekatantro'ham iti; paro brūyāt—nāhaṁ bravīmi nava tantrāṇi taveti, api tu navābhyastaṁ te tantram iti. bhiṣag brūyāt na mayā navābhyastaṁ tantram, anekadhā' bhyastaṁ mayā tantram iti. etad vākchalam. sāmānya-chalaṁ nāma yathā vyādhi-praśamanāyauṣa-dham ity ukte, paro brūyāt—sat satpraśamanāyeti kiṁ nu bhavān āha; san hi rogaḥ sad auṣadham; yadi ca sat sat-praśamanāya bhavati, tatra sat kāsaḥ, sat kṣayaḥ, satsāmānyāt kāsas te kṣaya-praśamanāya bhaviṣyati; etat sāmānya-chalam.—Ibid, pp. 270-271 (56).

17 Athāhetuḥ—ahetur nāma prakaraṇasamaḥ saṁśayasamo varṇyasamaś ceti. tatra prakaraṇasamo nāmāhetur yathā—anyaḥ śarīrād ātmā nitya iti, paro brūyāt—yasmād anyaḥ śarīrād ātmā tasmān nityaḥ; śarīraṁ hy anityam ato vidharmiṇā cātmanā bhavitavyam ity eṣa cāhetuḥ; na hi ya eva pakṣaḥ sa eva hetur iti. saṁśayasamo nāmāhetur—ya eva saṁśayahetuḥ sa eva saṁśayacchedahetuḥ, yathā—ayam āyurvedaika-deśam āha, kiṁ nv ayaṁ cikitsakaḥ syān na veti saṁśaye paro brūyāt—

yasmād ayam āyurvedaikadeśam āha tasmāc cikitsako' yam iti, na ca saṁśayacchedahetum viśeṣayati, eṣa cāhetuḥ, na hi ya eya saṁśayahetuḥ sa eva saṁśayacchedahetur bhavati. varṇyasamo nāmāhetuḥ—yo hetur varṇyāviśiṣṭaḥ, yathā-kaścid brūyāt—asparśatvād buddhir anityā śabdavad iti, atra varṇyaḥ śabdo buddhir api varṇyā, tad ubhayavarṇyāviśiṣṭatvād varṇyasamo' py ahetuḥ.—Ibid, p. 271 (57).

18 Atītakālaṁ nāma yat pūrvaṁ vācyaṁ tat paścād ucyate, tat kālātītatvād agrāhyaṁ bhavatīti; pūrvaṁ vā nigraha-prāptam anigṛhya parigṛhya pakṣāntaritaṁ paścān nigṛhīte tat tasyātītakālatvān nigrahavacanam asamarthaṁ bhavatīti.—Ibid, p. 271 (58).

19 Upālambho nāma hetor doṣavacanaṁ; yathā pūrvam ahetavo hetvābhāsā vyākhyātāḥ.—Ibid, p. 271 (59).

20 Parihāro nāma tasyaiva doṣa-vacanasya pariharaṇam; yathā nityam ātmani śarīrasthe jīvaliṅgāny upalabhyante, tasya cāpagamān nopalabhyante tasmād anyaḥ śarīrād ātmā nityaś ceti.—Ibid, p. 271 (60).

21 Pratijñāhānir nāma sā pūrvaparigṛhītāṁ pratijñām paryanuyukto yat parityajati, yathā—prāk pratijñāṁ kṛtvā nityaḥ puruṣaḥ iti, paryanuyuktas tv āha—anityaḥ iti.—Ibid, p. 271 (61).

22 Abhyanujñā nāma sā ya iṣṭāniṣṭābhyupagamaḥ.—Ibid, p. 272 (62),

23 See *A History of Indian Logic.* p. 35—Vidyābhūṣaṇa; also HIP. Vol. 2, p. 388.

24 Arthāntaraṁ nāmaikasmin vaktavye'paraṁ yad āha. yathā jvaralakṣaṇe vācye prameha-lakṣaṇam āha.—Ibid, p. 272 (64).

25 Nigrahasthānaṁ nāma parājayaprāptiḥ, tac ca trir abhihitasya vākyasyāparijñānaṁ pariṣadi vijñānavatyāṁ, yad vā ananuyojyasyānuyogo'-nuyojyasya cānanuyogaḥ. pratijñāhānir......arthāntaraṁ ca nigrahasthānam.—Ibid, p. 272 (65).

26 Vādas tu khalu bhiṣajāṁ pravartamāno pravartetā" yurveda eva nānyatra. atra hi vākya-prativākyavistaraḥ kevalāś copapattayaḥ sarvādhikaraṇeṣu. tāḥ sarvāḥ samavekṣyāvekṣya sarvaṁ vākyaṁ brūyāt, nāprakṛtaṁ aśāstram aparīkṣitam asādhakaṁ ākulam avyāpakaṁ vā, sarvaṁ ca hetumad brūyāt. hetumanto hy akaluṣāḥ sarva eva vādavigrahāś cikitsite kāraṇabhūtāḥ, praśastabuddhivardhakatvāt, sarvārambhasiddhiṁ hy āvahaty anupahatā buddhiḥ.—Ibid, p. 272 (67).

CHAPTER III

DIALECTIC IN WORKS ON LAW

After considering the *Caraka Saṁhitā* we feel tempted to consider works of another major branch of learning, viz. law and political science (*dharma-śāstra, artha-śāstra*) in the hope that they may throw some light on the origin and growth of dialectic. There was some kind of *sabhā* (assembly)[1] right from the vedic days and it was through discussion and debate that matters were settled in these *sabhās*. One of the principal kinds of matters taken up by these *sabhās* must have been of a legal character demanding juridical decisions and these *sabhās* must have developed into the courts of law of later days. Therefore it would not be surprising if the procedure of courts of law contributed to the development of dialectic and the technique of intellectual debates, just as the general development of the art of dialectic and the theories of *pramāṇas* (sources of valid knowledge) must have guided the legal procedures.

We have seen that Kauṭilya gives a section on *tantra-yuktis* at the end of his work and that it is important from the point of view of exegesis and dialectic. Carefully studying the legal procedure in deciding cases as laid down in works on Law, we find that it can very well be compared with the procedure adopted in a debate. The king's *sabhā* (assembly) is said to consist of seven, five or three members *(sabhāsad)*—an odd number, so that in the event of a difference of opinion, it would be easy to decide according to the opinion of the majority. The king is to personally decide all cases. When the king cannot personally attend to the cases, he should appoint a learned brāhmaṇa to look into them. Where a learned brāhmaṇa is not to be found, a

kṣatriya or even a vaiśya may be appointed. Besides these, there should be a *gaṇaka* (accountant) and a *lekhaka* (writer, scribe) having a thorough command over the vocabulary of the state language and knowing many languages and scripts and expert at counting. There should be a *puruṣa* (peon) who is to be ordered to summon and to give protection to witnesses, plaintiff and defendant and who should be truthful. The king's *sabhā* is said to have ten constituents, viz. king, appointed judge (*prāḍvivāka*), members, *smṛti*, *gaṇaka*, *lekhaka*, peon, gold, water and fire. The *sabhyas* (members) must be proficient in interpreting the *arthaśāstra* and *dharma-śāstra* texts, and must be truthful and dispassionate in their attitude towards friend or foe. The *prāḍvivāka* is so called because he puts questions to the litigants, puts forth or analyses the case and gives the decision (*Bṛhaspati-smṛti* 1.68). The king's *sabhā* is compared to a sacrifice.[2] The *sabhā* is four-fold according as it is *pratiṣṭhitā* (stable, situated in the same place) in a town or village or *apratiṣṭhitā* (mobile), *mudritā* (presided over by a judge), or *śāsitā* (presided over by a king) (*Bṛhaspati-smṛti* 1.57-58). *Pūga* (local committee, village panchayat, group of residents of the same place but of different castes and professions), *śreṇi* (trade or artisan guild, people of different castes but of the same profession) or *kula* (clan or family) may also be asked to decide particular cases. Of these each previous one is more powerful and authoritative than the succeeding one. Cases of artisans, merchants etc. which cannot be decided with confidence by the king's *sabhā* may be entrusted to people of the same profession. The judge and the *sabhyas* are not to hold conversation in private with any of the litigants while the suit is pending, otherwise they are liable to be fined.

Vyavahāra (law and administration) is so called because of its removing various doubts (*vi*=various, *ava*=doubt, *hāra*=removing).[3] This definition places the administration of justice on a high plane. The purpose of all branches of learning, especially philosophy, is the quest of truth. The purpose of legal

procedure also is, according to Kātyāyana, the same,—to find out the truth by removing doubts when there is a dispute. The philosopher may take his own time to find out the truth, but justice has to be done as quickly as possible. Legal procedure has its own method of finding out the truth; it depends on oral and documentary evidence. A subject-matter of litigation or dispute is called *vivāda-pada* or *vyavahāra-pada*, and a law suit *nyāya*. The *pramāṇas* recognised are *Veda* and its *aṅgas*, *upavedas* (minor *Vedas*), *purāṇas* (historical accounts), *dharmaśāstras*, and the customs or usages of the country, community or family provided they are not in conflict with the scriptural teaching. The law of the texts is required to be administered as tempered by common-sense and reason. As Bṛhaspati has laid down, a decision should not be given by merely relying on the text of the *śāstra*; when consideration of a matter is divorced from reason and common-sense, loss of *dharma* results.[4] Reasoning and logical examination have thus a place of their own in legal debates, though they would not normally be allowed to come into conflict with the vedic beliefs. Where there is no evidence available, the king is the final *pramāṇa*.

A *vyavahāra* (law-suit) is said to be *catuṣpāda*, having four feet, viz. *dharma*, *vyavahāra*, *caritra* (inference, usages and customs of a country, people, etc.), *rājaśāsana* (royal decree) — by the *Nārada-smṛti* (1.10); while according to the *Yājña-valkya-smṛti* (2.8) and *Bṛhaspati-smṛti* (2.1) they are the plaint *(bhāṣāpāda)*, the reply *(uttara)*, the proof *(kriyā)* and judgment or decision *(pratyākalita)*. Or, according to Kātyāyana, they are the plaint, the reply, the *pratyākalita* and *kriyā*, where *pratyākalita* is the deliberation of the judge and the *sabhyas* as to who should begin and on whom the burden of proof lies and as to the method of proof, and *kriyā* is the actual adducing of proof. *Dharma*, etc. are really the four feet of *nirṇaya* (final decision) which is one of the stages of a law-suit (*vyavahāra*), and so it is only in a secondary sense that they are the four *pādas* of a *vyavahāra*. *Dharma* signifies, it may

be noted, arriving at a decision with the help of ordeals, etc. whereas *vyavahāra* signifies arriving at a decision by means of ordinary worldly proofs.[5]

Law appears to have adopted the terminology of *turka-śāstra*, but historically it may also be that *tarka-śāstra* adopted some of its terms from the usage of law-courts (—*pakṣa*, *nirṇaya*, etc). The plaint is called by various names in Sanskrit, viz. *pakṣa, pūrvapakṣa, pratijñā, bhāṣā*. *Vādin* and *prativādin* generally mean the plaintiff and the defendant, though *vādin* sometimes means a litigant, i.e. either the plaintiff or the defendant. (Compare the meaning of *vādin* and *prativādin* in connection with a debate). The legal procedure also is comparable to the procedure in a debate. When the plaintiff first comes to the court, all that is taken down is the matter in dispute (i.e. the draft of the plaint, *pratijñā* or *pakṣa*). When the defendant comes, the plaint is written down accurately in his presence together with the year, month, fortnight, day, names of parties, caste, the matter in dispute and the like details *(Artha-śāstra* 3.1.17—*Yājñavalkya-smṛti* 2.6; *Bṛhaspati-smṛti* 2.5ff*)*. Kātyāyana says that the judge should have the plaint written on a board with a piece of chalk as narrated naturally by the plaintiff, and then on a leaf (palm-leaf or bark or paper), when it is corrected after the defendant appears; and the plaintiff may delete some matters from the original draft of the plaint and may fill in gaps; and such amendments may be made in the draft till the plaint is finally settled. The plaint can be amended till the filing of the reply (Compare the court-scene in the *Mṛcchakaṭika*).[6]

The *smṛti*-writers mention some reasons which render a plaint invalid *(pakṣābhāsa)* or unacceptable. A plaint which fails to mention the time and place, which omits the statement of the material (*dravya*, which is the subject of dispute) or the amount thereof and which does not mention the extent of the relief claimed, which is opposed to the interests or usages of the country, which is prohibited by the king's order, or which mixes up several *vyavahārapadas* (matters of dispute, the trial of

which cannot be carried on simultaneously but only one after the other–) is unacceptable. Certain plaints are not entertainable, viz. a plaint that contains an unknown or imaginary grievance, that discloses no injury, that contains letters or words making no coherent sense, that states no cause of action, that is incapable of proof or is self-contradictory.* The *smṛtis* did not encourage disputes based on flimsy grounds. That is a legitimate *pakṣa* which is free from the faults mentioned above, which is capable of proof, which states the real cause of action, which is certain, well known. A plaint (*pakṣa*) should be brief but compact with meaning, free from doubt, not vitiated, free from contradictory causes and capable of silencing the opponent.[7]

When the plaint has been finally settled, the defendant should be called upon to reply in writing to the plaint in the presence of the plaintiff. The answer of the defendant should possess the following characteristics, viz. it should completely meet all the points of the plaint, it should not deviate from the truth, should not employ vague words, should not be self-contradictory, it should not be such as to require further explanation because of containing words in a foreign tongue or unknown or rarely used words or elliptical or badly arranged sentences.× [8] Kātyāyana states at great length the faults of a reply and also what are not proper replies (See *Dharmakośa*, Vol. I, Part I, pp. 176ff).

When the reply has been given the *sabhyas* consider the question about the burden of proof. After examining the nature of the reply, the *sabhyas* should call upon one of the parties to prove his case. What a party sets out to prove is called *sādhya*; and the means whereby the claim of the litigant in its entirety is established is called *sādhana*. The party on whom the burden of proof lies should ordinarily write down the means whereby he proposes to prove his position immediately after the reply has been given. This third stage is

* Compare the *nigrahasthānas* of *Nyāya-sūtra*.

× Compare the *nigrahasthānas avijñātārtha, apārthaka*, etc.

called *kriyā* or proof. In the event of the reply being a case of denial, the burden of proof is on the plaintiff; in a reply of the nature of former judgment or of a special plea, it is on the defendant; and in a reply of admission, no question of burden of proof arises. The *Mitākṣarā* on *Yājñavalkya-smṛti* 2.80 states that an affirmative proposition has to be proved by one who asserts it. The plaintiff is expected to rejoin immediately after the defendant has answered the questions at issue, for he is aware of the determining factors of the case. The defendant, on the other hand, may be allowed three or seven days or even more time (according to the nature of the case) to prepare his defence.[9] (In a debate also, it may be noted, the *prativādin* is given time to prepare his answer). Means of proof are two-fold in a legal suit—human and super-natural; documents, witnesses and possession (*bhukti*) are the human means of proof, while the ordeals of balance, fire, etc. are supernatural means. Intellectual debates also were at times decided by means of ordeals, though the logical sources of proof were fully exploited.

Finally, it may be noted that while describing political despatches, Kauṭilya gives in his *Arthaśāstra* (2.10.6ff) some qualities which the composition in such despatches should possess. He mentions them as the excellences of the despatch (*lekha-sampat*), and speaks of six qualities as constituting *lekha-sampat* — '*Arthakramaḥ sambandhaḥ paripūrṇatā mādhuryam audāryaṁ spaṣṭatvam iti lekha-sampat* (2.10.6). *Arthakrama* (order and method of presentation) signifies the mention of facts in the order of their importance; the ideas have to be arranged with proper emphasis on the chief idea. *Sambandha* (relation) comprehends coherence, relevancy, etc. of the several ideas, which qualities alone can remove the flaw of mutual or internal contradiction among the ideas (—compare the *nigrahasthānas arthāntara, apārthaka*). Avoidance of redundancy or deficiency in words or letters, development of the idea and substantiating it by means of reasons, illustrations and analogies, and the use of forceful expression (*aśrānta-*

padatva) constitute *paripūrṇatā* (completeness). The description in exquisite style of a good purport with a pleasing effect is *mādhurya* (sweetness). *Audārya* (exaltedness) signifies the avoidance of the ordinary colloquial words, and *spaṣṭatva* (lucidity or clarity) the use of well-known and easily understandable words which convey their import quickly and are not ambiguous or obscure (—Compare *'avijñātārtha'*).[10]

Towards the end of the same section, Kauṭilya describes some defects that may vitiate a *lekha* (—*lekha-doṣas*). From these *doṣas*, some *guṇas* can be derived. *'Akāntir vyāghātaḥ punaruktam apaśabdaḥ saṁplava iti lekhadoṣāḥ,'*—2.10.57. *Akānti* means slovenliness; black and ugly leaf (i.e. writing material) and uneven and uncoloured writing cause *akānti*. *Vyāghāta* (contradiction) is a flaw resulting from the absence of the *guṇa* called *sambandha*; the subsequent portion of a *lekha* not agreeing with the previous portion gives rise to contradiction. *Punarukta* is unnecessary repetition. *Apaśabda* (bad grammar) signifies the wrong use of gender, number, tense and case. Division of a paragraph at unsuitable places, omission of the necessary division of paragraphs, and violation of the necessary qualities (*guṇa-viparyāsa*) of a *lekha* constitute *saṁplava*. *Akānti* and the first part of *saṁplava* are, it seems, faults pertaining to calligraphy. The others correspond to the *nigrahasthānas* of dialectic.

It may be noted that some *doṣas* mentioned in works of *Kāvyaśāstra* also correspond to these *nigrahasthānas*. As we have seen, Sulabhā in the Mahābhārata, mentions several characteristics of good speech as also faults that should be avoided and these have their counterparts in the *nigrahasthānas*. The *Anuyogadvāra* (pp. 261 ff—Āgamodaya Samiti) of the Jaina tradition, also mentions a few logical flaws of expresson besides ethical and literary ones. We can infer from these descriptions that the school-men had come to formulate the requirements of good speech or a good statement and these were reflected in the rules pertaining to legal procedure, debate, literary composition and the like.

It can be seen from the above exposition that the procedure of a legal dispute, its requirements, the requirements of a plaint or the answer to it, the legal terminology, the characteristics of a good *lekha* as also its flaws find their parallel in the procedure of intellectual disputes or debates and matters connected with them, and the syllogistic statement of the arguments. These parallels seem to suggest that the development of dialectic has much to do with its practice in courts of laws, though it would be hazardous to say that dialectic originated and developed out of the practice of law-courts. The two aspects of life in which dialectic and the theories of *pratyakṣa* and other *pramāṇas* had a practically vital effect were no doubt the dispensation of justice and the physical ills of man. And we may say that but for such vital needs, dialectic would not have received the attention it did at the hands of the people at large and the logicians and dialecticians in particular. Sciences primarily arise to satisfy the vital needs of man and then are carried to the level of abstract and subtle theorising. Society can tolerate abstract thinking and almost ununderstandable subtleties and even hair-splitting discussions carried to an extreme only if a science appears to have some practical use somewhere.

This tendency gives prestige to such modes of thought,— in a word, to the *śāstra* as such. This naturally affords much scope to the proliferation of the art of dialectic which gradually develops into a *śāstra* by itself, even more abstract and subtle than the other *śāstras* which depend on it.

NOTES

1 Kane's *History of Dharmaśāstra*; Vol. 3 and *Dharmakośa*, *Vyavahārakāṇḍa*, Vol. I, Part 1 have been our main sources of information.

2 See *Dharmakośa*, *Vyavahārakāṇḍa*, Vol. I, Part 1, *Vyavahāramātṛkā*, pp. 27ff (Prajñā Pāṭhaśālā Maṇḍala, Wai, 1937), *Bṛhaspati Smṛti* 1.55ff (GOS), etc.

3 Vi nānārthe'va sandehe haraṇaṁ hāra ucyate,
nānā-sandeha-haraṇād vyavahāra iti smṛtaḥ.

—Kātyāyana as quoted in *Vyavahāramātṛkā*, p. 283 (See *Dharmakośa*, Vol. I, Part 1, p. 5).

4 Kevalaṁ śāstram āśritya na kartavyo vinirṇayaḥ,
yuktihīne vicāre tu dharma-hāniḥ prajāyate
—*Bṛhaspati-smṛti*; 1.114.

5 See *Dharmakośa*, Vol. I, Part 1 (*Vyavahārakāṇḍa*), pp. 18-19; *Bṛhaspati Smṛti* 1.18ff; 2.1ff.

6 See *Dharmakośa*, Vol. I, Part 1, pp. 137–158.

7 See *Bṛhaspati Smṛti*, 2.5ff.

Aprasiddhaṁ sadoṣaṁ ca nirarthaṁ niṣprayojanam,
asādhyaṁ vā viruddhaṁ vā pakṣaṁ rājā vivarjayet. 8

na kenacit kṛto yas tu so'prasiddha udāhṛtaḥ,
anyārthaḥ svārthahīnaś ca sadoṣaḥ parikīrtitaḥ. 9

svalpāparādhaḥ svalpārtho nirarthaka iti smṛtaḥ,
kāryabādhāvihīnas tu vijñeyo niṣprayojanaḥ 10

kusīdādyaiḥ padair hīno vyavahāro nirarthakaḥ,
vāk-pāruṣyādibhiś caiva vijñeyo niṣprayojanaḥ. 11

mamā'nena pradātavyaṁ śaśa-śṛṅgakṛtaṁ dhanuḥ,
asambhāvyam asādhyaṁ taṁ pakṣam āhur manīṣiṇaḥ. 12

yasminnāvedite pakṣe prāḍvivāke ca rājani,
pure rāṣṭre virodhaḥ syād viruddhaḥ so'bhidhīyate. 13

pratijñā-doṣa-nirmuktaṁ sādhyaṁ satkāraṇānvitam,
niścitaṁ lokasiddhaṁ ca pakṣam pakṣavido viduḥ. 14

svalpākṣara-prabhūtārtho nissandigdho nirākulaḥ,
virodhikāraṇair mukto virodhi-pratiṣedhakaḥ. 15

vacanasya pratijñātvaṁ tadarthasya hi pakṣatā,
asaṅkareṇa vaktavye vyavahāreṣu vādibhiḥ. 16

mohād yadi vā śāṭhyād yan noktam pūrvavādinā,
uttarāntargataṁ vā'pi tad grāhyam ubhayor api. 17

evamādiguṇān samyag ālocya ca suniścitaḥ,
pakṣaḥ kṛtaḥ samādeyaḥ pakṣābhāsas tato' nyathā. 18

—*Bṛhaspati Smṛti*, 2. 8–18.

8 Pakṣasya vyāpakaṁ sāram asandigdham anākulam,
avyākhyāgamyam ity etad uttaraṁ tadvido viduḥ.

—ascribed to Nārada and quoted in *Mitākṣarā* on *Yājñavalkya Smṛti* 2.7. See *Dharmakośa*, Vol. I, Part 1, p. 162. See also *History of Dharma-Śāstra*, Vol. 3, pp. 242ff—P. V. Kane (B.O.R.I.; Poona. 1946).

9 See *Arthaśāstra*, 3.1.27ff.

10 Arthakramaḥ sambandhaḥ paripūrṇatā mādhuryam audāryaṁ spaṣṭatvam iti lekha-sampat. tatra yathāvad anupūrva-kriyāpradhānasyā'rthasya pūrvam abhiniveśa ity arthasya kramaḥ. prastutasyā'rthasyānuparodhād uttarasya vidhānam ā samāpter iti sambandhaḥ. artha-padākṣarāṇām anyūnātiriktatā hetūdāharaṇa-dṛṣṭāntair arthopavarṇanā' śrāntapadeti paripūrṇatā. sukhopanīta-cārvarthaśabdābhidhānaṁ mādhuryam.agrāmya-śabdābhidhānam audāryam. pratītaśabda-prayogaḥ spaṣṭatvam iti.

—*Arthaśāstra*, 2.10.6–12.

Dr. Raghavan has given a fine exposition of these in Bhoja's *Śṛṅgāra Prakāśa*, Vol. I, Part 2, pp. 261-263, pp. 224ff (Karnataka Publishing House, Bombay).

CHAPTER IV

TYPES OF DEBATE (*KATHĀ*)

Vāda (**discussion**), *Jalpa* (**disputation**),
Vitaṇḍā (**wrangling**)

According to the *Nyāya-sūtra*, *kathā* (debate or controversy) can be of three kinds-*vāda* (discussion), *jalpa* (disputation) and *vitaṇḍā* (wrangling).

Vāda :

Discussion consists in the putting forward by two parties of a proposition (*pakṣa*) and a counter-proposition (*pratipakṣa*), in which there is the procedure of establishing and confuting by means of *pramāṇas* (proofs) and *tarka* (hypothetical reasoning), neither of which is quite opposed to the main thesis (*siddhānta*), and both of which are conducted in accordance with the method of reasoning through the five factors (*pramāṇa-tarka-sādhanopālambhaḥ siddhāntāviruddhaḥ pañcāvayavopapannaḥ pakṣa-pratipakṣa-parigraho vādaḥ.*— *NS.* 1.2.1).

When two contradictory characters are alleged to subsist in the same substratum (at the same time, and are uncertain or undetermined—*Vārttika*), they are called *pakṣa* (view, proposition) and *pratipakṣa* (counter-view, counter-proposition) inasmuch as they are opposed to each other; for instance, ' Soul is ', and ' Soul is not '. If these contradictory characters are conceived as subsisting in different substrata, they are obviously not *pakṣa* and *pratipakṣa*; for instance, ' Soul is eternal ', and ' Intellect is non-eternal '. *Vāda* is the *parigraha* or acceptance or methodical assertion of these *pakṣa* and *pratipakṣa*. The two views—*pakṣa* and *pratipakṣa*—are supported or established and condemned or confuted by either party

with the help of *pramāṇas* (proofs, sources of valid knowledge), and *tarka* (hypothetical reasoning)* which though itself not a *pramāṇa* strengthens the case of a *pramāṇa*. These establishing and confuting are interrelated and connected with each other in a *vāda* until one of the two views is rejected and the other is established. Thus ultimately the view that gives way is rejected and that which is unshaken is established.

Nigrahasthānas (ground of defeat or censure)× are employed in *jalpa*, hence their use is banned in *vāda* (*jalpe nigrahasthānaviniyogād vāde tatpratiṣedhaḥ*—NB. 1.2.1.). What is meant is that *vāda* is an ideal debate meant for the discernment of truth and not for fault-finding. Hence even though there might be grounds of censure in the other party's argument, one should not normally waste time in pointing them out and thereby defeating the other party, but should encourage further discussion Nevertheless some grave errors as go against the very thesis or the accepted doctrine have to be urged to clarify the point at issue, e g. the fallacy of contradiction (*viruddha*). To permit the detection and exposure of some of the *nigrahasthānas* the author of the *Nyāya-sūtra* has introduced in the definition of *vāda* the qualification 'not contrary to the main thesis'. This permits the employment of checks in the form of the exposure of the fallacy of contradiction (*viruddha*) which is defined as that which contradicts the main thesis (*siddhāntam abhyupetya tadvirodhī viruddhaḥ* —*NS*. 1.2.6). The *Vārttika* does not accept this interpretation of the *Bhāṣya*; but says that the qualification is meant to permit the exposure of the *nigrahasthāna* called '*apasiddhānta*' (Inconsistency or contradicting one's own accepted theory or conclusion). The *Pariśuddhi* explains the difference in the two interpretations thus : We have a general rule that no animal should be killed, and then we have an

* Tarka signifies reasoning meant to indicate absurdity in the opponent's thesis

× We shall call the detection and exposure of these 'check', inasmuch as this checks the opponent.

exception that the *agnisomīya* animals should be killed. Similarly, here, we have the general rule that no *nigrahasthāna* should be urged, and then the exception that the *viruddha* should be urged. This is how the *Bhāṣya* would interpret the expression '*Siddhāntāviruddhah*'. According to the *Vārttika*, the sense is that there is a natural tendency to urge all *nigrahasthānas*, and hence the *apasiddhānta* is exclusively selected as the only one to be urged as being a grave defect which should be exposed. * Similarly the qualification 'conducted in accordance with the method of reasoning through the five factors' means that it is permitted in *vāda* to employ the 'checks' *nyūna* (deficiency) and *adhika* (redundance) (*NS* 5.2 12–13).

Though *pramāṇas* and *tarka* are implied in the qualification 'in accordance with the reasoning through the five factors', yet they are separately mentioned to point out that *pramāṇas* and *tarka* employed by the two parties should be interrelated and not independent of and indifferent to each other. One party should not, for example, just keep on urging arguments in support of the existence of the soul, and the other party in support of its own contention, viz, the non-existence of the soul, without paying any heed to the arguments put forth by the other party in support of its own view or for condemning the rival view. In the absence of this qualifying expression it would be a case of *vāda* when both parties keep on advancing arguments in support of their respective views (without paying any heed to, or trying to

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* The Pariśuddhi goes on to say that from among the twenty-two *Nigrahasthānas*, there are six that cannot by their very nature be employed in *vāda--pratijñā-hāni*, *pratijñā-sannyāsa*, *nirarthaka*, *arthāntara*, *avijñātārtha* and *apārthaka*, for no debater would in a *vāda* try to confuse his opponent by such tricks. There are seven which though possible should not be urged—*pratijnāntara*; *hetvantara*, *ajñāna*, *apratibhā*, *vikṣepa*, *matānujñā*, *paryanuyojyopekṣaṇa*. There are seven which may be urged —*virodha*, *aprāptakāla*, *nyūna*, *adhika*, *punarukta*, *ananubhāṣaṇa*, *apasiddhānta*. There are two, which when urged put an end to the debate viz. *hetvābhāsa* and *niranuyojyānuyoga*.

refute, the opponent's argument) (*anyathobhāv api pakṣau sthāpanāhetunā pravṛttau vāda iti syāt.*—NB. 1.2.1). Moreover, in some cases it is found that even without the use of the five factors of reasoning, several *pramāṇas* achieve their purpose of determining the true nature of things, so it would be a case of discussion even when the establishing and confutation are done by means of such proofs as are independent of the five factors of a syllogism; and it is this fact that is brought out by the expression 'by means of *pramāṇas* and *tarka*'; whereas in the absence of this term, the presence of the five factors would always be essential in a discussion, and the above mentioned form of *vāda* would not be included in the definition.[1]

It may be noted that even in *jalpa* (disputation), the procedure is of the same type as in *vāda*, the supporting and the condemning of the rival views being done by means of *pramāṇas* and *tarka*, and in a manner not opposed to the same thesis, the reasoning being conducted with the help of five factors. Yet *vāda* is primarily meant for the discernment of truth or the real nature of the thing under investigation and imparting the truth as one understands it to the other party; that is to say, in *vāda*, there is no consideration of victory or defeat. On the other hand, in *jalpa*, victory is the sole end in view and so the reasoning is not always as sound as it ought to be. Hence it is not possible to make any such distinction as : *Jalpa* is that in which the supporting and condemning are done by means of *chala* (quibble), *jāti* (futile rejoinder) and *nigrahasthāna* (ground of censure); and that in which they are done by *pramāṇas* and *tarka* is *vāda* only. In order that one might not be tempted to make such a distinction, the qualification, ' in which the supporting and condemnation are done by means of *pramāṇas* and *tarka* ' is separately mentioned.[2]

The distinction between *vāda* and *jalpa* is thus explained by Vācaspati in his *Tātparya Ṭīkā* : Whether or not the reasoning factors actually employed are based upon *pramāṇas* and *tarka* does not matter; but in *vāda*, the

parties themselves are quite certain as to their being so, and there is no intention to deceive; both parties being free from any arrogance or desire to win in the debate, do come to a right understanding after all. In *jalpa* and *vitaṇḍā*, on the other hand, even the learned debater may put forward reasons and arguments which he knows to be untrue, so that there is full scope for *chala, jāti* and *nigrahasthāna.* Though these latter do not lead to the correct conclusion or even to victory, yet the employer of these has this in mind that it is enough if he can succeed in averting defeat by creating a sense of doubt in the minds of all concerned.[3]

We may note here a few points clarified by Uddyotakara and Vācaspati. It may be objected as to how supporting and condemning could both be done by means of *tarka* (hypothetical reasoning) when according to the Naiyāyikas it is neither included in the recognised *pramāṇas* (sources of valid knowledge), nor is an independent *pramāṇa* (See NB. 1.1.40). The answer to this is that it is not meant that *tarka* is the cause or instrument of supporting and condemning; what is meant is that *tarka* serves the purpose of investigating the real nature of the thing on which the *pramāṇas* operate; so that these *pramāṇas* come to determine the real nature of the thing, which has been investigated into by *tarka* to be such. Thus being an aid to *pramāṇas, tarka* comes to be mentioned along with *pramāṇas* in connection with *vāda.*[4]

Uddyotakara rightly says that the very use of the word '*upālambha*' in the definition of *vāda* indicates that the employment of 'checks' is permissible in a *vāda*[5]; that is to say, one can lay one's finger on points of defeat or censure in a *vāda*. And so it is necessary to restrict the number of *nigrahasthānas*, which can be urged in a *vāda*, by further qualifications like 'not opposed to the main thesis', 'in accordance with the reasoning by five factors' which permit the exposure of *apasiddhānta, nyūna, adhika* (—also indicating the

possibility of the urging of the defects of the factors, and hence of *hetvābhāsas* or fallacies of the probans, according to Uddyotakara).

Now it may be asked as to why there is this restriction regarding the employment of these two checks (viz. defects of factors and *apasiddhānta*) alone in a *vāda*. The answer to this is that *vāda* is that form of controversy (*kathā*) which one holds with the teacher and such other friendly persons; that is to say, in which an honest inquirer after truth enters into a controversy with his teacher and other friends, with a view to gaining knowledge of what he does not know, remove his doubts and obtain the corroboration of what he already knows; so for the sake of this seeker after truth, it is necessary for the other party to set forth arguments so long as the enquirer does not obtain the true knowledge he is seeking, as in *vāda* he is not an opponent to be silenced, but an honest enquirer after truth who is to be enlightened. Therefore, in *vāda* only such *nigrahasthānas* should be urged as would expose the untruth or help to elucidate the truth. On the other hand, the controversy that one enters into with an opponent is not *vāda* (discussion), but *jalpa* (disputation); and in this latter it is but right (or permissible) that every check should be employed. As Vācaspati and Jayanta explain, the exposure of embarassment (*apratibhā*), etc. does not help the enquirer to know the truth. In Vācaspati's view, even *adhika* (redundance) though it does not directly obstruct the discernment of truth, yet it only serves to confuse the man and so obstructs his knowledge of truth; this explains why *adhika* is permitted to be urged in a *vāda*. Several *nigrahasthānas* which generally are given no importance in a honest discussion or *vāda*, are exposed in disputation (*jalpa*) where the aim is not so much to arrive at the truth as to silence the opponent.[6]

All kinds of *nigrahasthānas* might be present in the method of debating of the two parties in a *vāda*, but they are not generally adduced as grounds of defeat unless they

obstruct the understanding of truth (as in the case of *hetvābhāsa, apasiddhānta, adhika, nyūna*). For instance, a person may speak after giving proper thought to the point at issue, or mention an important point only when it strikes him, yet he is not charged with *apratibhā* (embarassment); or he may interrupt or stop the *vāda* if he thinks it necessary and yet he is not accused of *vikṣepa* (evasion).

It may, moreover, be objected that the expression "in which establishing and confutation are done by means of *pramāṇas* and *tarka* would imply that both the contrary views being equally capable of being established (or condemned) by *pramāṇa* and *tarka*, they are both correct (or both incorrect), and in the former case, the thing in question should have two contrary characters. But this absurd position does not arise. It is not stated that proofs are available to both the parties; all that is meant is that it is incumbent on both the parties to put forward, in establishing their view, what they honestly believe to be valid proofs only, and it does not follow that these should be real proofs. This is true in the case of condemning or confutation also.[7] As the *Tātparya Ṭīkā* puts it : In a *vāda* there is a restriction on the arguments of the two parties, that only such arguments in support and condemnation are put forward as the parties themselves consider to be sound and not what they themselves know to be unsound, such unfair arguments being employed in *jalpa* and *vitaṇḍā*. But this does not mean that the views in support of which arguments are set forth are necessarily true. Thus in a *vāda* also, *chala* (quibble), etc. should be exposed, but only in so far as this is necessary for the knowing of the truth; that is to say only such *nigrahasthānas* are to be urged without the exposure of which it would be impossible to arrive at the truth. But that need not be exposed, in the event of whose non-exposure the understanding of truth is not in the least deterred.[8]

We may note in passing that Uddyotakara after giving an exposition of the definition of *vāda* in the *Nyāya-sūtra*

criticises a definition of *vāda* given by another logician, viz. *Vāda* is statement (of arguments) for the purpose of establishing and confuting one's own and another's view (respectively) (*'Sva-para-pakṣayoḥ siddhyasiddhyarthaṁ vacanaṁ vādaḥ* —NV, p. 150). The *Tātparya Ṭīkā* (p. 317) calls this definition 'Vasubandhu's definition' (*Vāsubandhavam lakṣaṇam*). We know of a Buddhist logician Vasubandhu (4th–5th century A.D.), author of *Vādavidhāna* and *Vādavidhi*, whose definition this might have been. We cannot say that Uddyotakara's criticism of this definition is always fair and honest[9]. There is much by way of hair-splitting and fault-finding in it; and an exposition of it could hardly be said to add much to our understanding of *vāda.* The definition as it stands (however brief and inexact it might be) gives us a fairly good idea of *vāda* and does not deserve to be condemned so severely.

Jalpa :

Disputation (*jalpa*) is that which is endowed with the said characteristics, and in which there is establishing and confutation by means of *chala* (quibble), *jāti* (futile rejoinder) and *nigrahasthānas* (grounds of defeat) (also) (*Yathoktopapannaś chala–jāti–nigrahasthāna–sādhanopālambho jalpah.*—NS. 1.2.2). In a *jalpa*, a proposition and a counter–proposition are set forth; a *jalpa* consists in supporting and condemning these by means of *pramāṇas* and *tarka;* it is not opposed to the main thesis, and is carried on in accordance with the method of reasoning through the five factors. All these characteristics *jalpa* has in common with *vāda.* The peculiarity of *jalpa* as distinguished from *vāda* lies in this that in it *chala, jāti* and *nigrahasthānas* also are employed for the establishing and the refutation of the proposition and the counter–proposition.

Vātsyāyana gives a detailed exposition of this definition. Anticipating an objection, he says that it might be objected as to how *jāti,* etc. which are meant only to condemn and oppose can serve the purpose of supporting or establishing anything. Further, there is nothing in the definition as we

have it, which could enable us to intepret it to mean that in *jalpa*, *chala*, etc. help to support propositions by opposing their opposites. This sense could be had only if we had the definition in the form: 'Disputation (*jalpa*) is that in which condemnation is done by means of *chala, jāti, nigrahasthāna*'; that is to say, if the term 'supporting' (*sādhana*) were not there at all. ('*chala-jāti-nigrahasthānopālambho jalpa ity evam ucyamāne vijñāyate etad iti*-NB. 1.2.2).

The answer to the above objection is that as a matter of fact both supporting or establishing and condemning or confuting are done by means of *pramāṇas* (sources of valid knowledge), and *chala*, etc. come in only as auxiliaries serving the purpose of guarding one's own view; these never, by themselves, serve as the means of establishing. Whenever they are employed they, as a matter of fact, guard one's own view by attacking or opposing the other view. * This is exactly what is stated in a later *sūtra. Jalpa* and *vitaṇḍā* are meant to protect one's own determination regarding the real nature of things, just as a thorny hedge serves the purpose of protecting sprouting seeds (*tattvādhyavasāya-saṁrakṣaṇārthaṁ jalpa-vitaṇḍe bīja-praroha-saṁrakṣaṇārthaṁ kaṇṭaka-śākhāvaraṇavat.*-NS. 4.2.50). Similarly, when a person condemns a counter-view by means of *pramāṇas*, if he employs *chala*, etc. they become helpful in nullifying or warding off the attacks that may be made against that condemnation. Thus, *chala*, etc. are employed mostly as auxiliaries. It may be noted that in the supporting or establishing of a thesis, they can never be direct means, whereas in condemning they can independently serve as the direct means also.[10]

Uddyotakara takes exception to this objection and the answer to it. He would anticipate an objection as follows: No supporting or condemning of any thesis can be done by *chala*, *jāti* and *nigrahasthāna* as all these are of the nature of

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* It is interesting to note that the *Nyāya-sūtra-vivaraṇa* takes '*sādhanopālambhaḥ*' as '*sādhanāya upālambhaḥ*', condemning for the purpose of proving.

improper answers (*ayuktottaratvāt*). These cannot even safeguard the proving or the disproving done by means of the *pramāṇas* and thus serve as useful auxiliaries, even because they are improper answers.[11] As Vācaspati says, even a thousand blind men cannot protect a house from thieves. Then why are they employed at all?

The answer is that they are employed for the purpose of demolishing the arguments of others. That is to say, *chala*, *jāti* and *nigrahasthāna* are employed by a disputant who is carried away by the idea of crushing the arguments put forward by the other party; they are not employed (at least not knowingly) in a *vāda* by one who has a craving for true knowledge. *Chala*, etc. are neither capable of proving anything, nor of serving as auxiliaries; they are employed by a disputant who is taken aback by the logical proof advanced by his opponent so as to take a chance that the opponent might be confused by these and might even be defeated in the controversy. They are thus to be employed only by a disputant aiming at victory and not by a genuine *vādin* (debater) aiming at the discernment of truth.[12] Vācaspati says that in a *vāda* proper, *chala*, etc. are absolutely incapable of even obstructing or demolishing a proof; but a person may employ them when in his anxiety to crush the proof adduced by the other party, he fails to realise the fact of their being improper answers. If however he is conscious of their being improper answers, he will not employ them in a *vāda*, such a deliberate use of improper answers occurring only in *jalpa* and *vitaṇḍā*, wherein though they cannot do any proving or disproving as they are improper answers, yet they serve to confound the opponent especially when one cannot promptly give a proper rejoinder to his argument. At times they serve to protect one's own conviction of truth and therefore their exposition in books on dialectic is justified.[13]

We may note here an objection to the definition of *jalpa*, anticipated by Uddyotakara, to the effect that it is not correct

to say that *jalpa* is endowed with the said characteristics (*yathoktopapannaḥ*) because the restriction in regard to only particular *nigrahasthānas* being employed in *vāda*, which is indicated by the terms '*pañcāvayavopapannaḥ*' (carried on in accordance with the method of reasoning through the five factors) and '*siddhāntāviruddhaḥ*' (not opposed to the main thesis'), does not apply to *jalpa* which admits of the employment of all the *nigrahasthānas*. The term '*yathoktopapannaḥ*' is not, therefore, proper.

Uddyotakara says that there is no force in this objection. Firstly, the transference of epithets depends entirely upon plausibility, so that only as many of the 'said characteristics' would be transferred to the definition of *jalpa*, as are found applicable, viz. 'in which supporting and condemning are done by means of *pramāṇas* and *tarka*.' What is meant by saying that *jalpa* is 'endowed with the said characteristics' is that it has all those qualifications which are directly mentioned in the definition of *vāda*, and not those which are implied in view of the conditions peculiar to *vāda* only, the said restriction belonging to this latter category. We have an instance of this method of transference in the *Vaiśeṣika Sūtra*. There are two *sūtras* to the following effect : 'The perception of colour is due to inherence in a thing made of several substances and to the peculiarities of colour' (4.1.8) and 'This explains the perception of taste, odour and touch' (4.1.9). (*Anekadravyeṇa draveyeṇa samavāyād rūpaviśeṣāc copalabdhiḥ. etena rasa-gandha-sparśeṣu jñānaṁ vyākhyātam*). Here 'peculiarity of colour' of the former *sūtra* is not transferred to the following *sūtra*, but only 'inherence in a thing made of several substances', which alone is applicable in the latter case.

Or secondly, the compound '*yathoktopapannaḥ*' may be explained as '*yathoktopapannena upapannaḥ*', one '*upapanna*' being elided on the ground of its being understood by implication from the single tern '*upapanna*', just as we have the compound

'*gorathaḥ*' (which stands for '*gobhiḥ yuktaḥ rathaḥ*'.× The term will then mean 'endowed with those characteristics that are directly mentioned in the preceding *sūtra* (and not those that are implied or indirectly obtained).' We obtain this meaning on the strength of the possibility of application. There is no possibility in *jalpa* of the restriction implied by the two terms which, therefore, cannot be transferred to this definition.

How then can the *Bhāṣya* be justified which obviously transfers the entire definition of *vāda*? Uddyotakara says that it is not so; all that the *Bhāṣya* does is to explain what is indicated directly by the sequence of the two *sūtra*-texts, the sense being that what is to be transferred to the later *sūtra* is only that which is directly stated in the previous *sūtra* (and not also what is implied).[14]

We may recapitulate by saying that the assertion of a view and a counter-view is a *vāda* when no such improper devices as *chala*, *jāti* and *nigrahasthāna* are employed, or if employed are not knowingly employed; and it is *jalpa* or *vitaṇḍā* when these are knowingly employed.[15]

Vitaṇḍā :

That same disputation is *vitaṇḍā* (wrangling) when there is no establishing of the counter-view (*sa pratipakṣasthāpanāhīno vitaṇḍā*-NS. 1 2,3). (It may be noted that the view or thesis of the person criticising is called counter-view (*pratipakṣa*) here as opposed to the view he is criticising.[16]

Out of the above mentioned *pakṣa* (view or thesis) and *prati-pakṣa* (counter-view or counter-thesis) in regard to the two contrary attributes believed by the two rival parties to be subsisting in the same substratum at the same time and in an uncertain manner (—that is to say, about which there is a difference of opinion), the *vaitaṇḍika* (wrangler) does not establish what he himself holds, but only keeps on criticising and condemning the proofs adduced for proving the thesis

× Compare 'Mṛganayanā' = Mṛga-nayana-nayanā.

of the other party. In that case, one might say, the definition of *vitaṇḍā* had better be stated in the form, 'It is that *jalpa* which is without a counter-thesis' (*astu tarhi pratipakṣahīno vitaṇḍā*—NB. 1.2.3). But as a matter of fact, the statement that the *vaitaṇḍika* makes in refuting the opponent's view would constitute his own view, and what is meant by the definition in the *Nyāya-sūtra* is only that he does not proceed to propound a thesis of his own and establish it. Hence it is better to have the definition as it stands.[17]

Vācaspati tries to clarify this explanation of Vātsyāyana by saying that when the *vaitaṇḍika* confines himself to merely criticising the opponent's view he does so with the idea that when the opponent's view has been rejected as wrong it would follow as a necessary consequence that his own view is right, so that he does have a view of his own, but it is not proved separately from, and independently of, the refutation of the other view. Though the *vaitaṇḍika* has a view of his own yet he does not make any attempt to establish it, apart from the attack that he directs against the other view. Hence, it is only right to speak of there being no establishing of his own view, but it would be wrong to say that there is no view of his own.[18]

The *Vārttika* takes note of a view according to which it would be best to define *vitaṇḍā* as consisting of 'criticism only', (*duṣaṇamātraṁ vitaṇḍā*), the 'only' indicating that the *vaitaṇḍika* has no thesis of his own.* Such a definition, according to Uddyotakara, is not proper. When admitting the fact of criticism, the *vaitaṇḍika* admits four things, viz. (*i*) the view to be criticised, (*ii*) the fact that the view of the other party represents a wrong idea, (*iii*) the presence of the

* This, according to the *Tātparya Ṭīkā* is only a presentation of the objection as urged in the *Bhāṣya* that *vitaṇḍā* should be defined as only '*pratipakṣahīnaḥ jalpaḥ*'. But in the *Caraka Saṁhitā* we find *vitaṇḍā* defined as '*parapakṣe doṣavacanamātram eva.*' [CS., p. 266 (28)]. There must have been a tradition in which *vitaṇḍā* was defined as '*dūṣaṇamātram*'.

propounder of the other view, (*iv*) the presence of himself as the person to whom the other view is propounded; and all this would be impossible if criticism or condemnation alone were accepted as the definition of *vitaṇḍā*. If all the rest are taken as naturally implied, then it would be just as well to define *vitaṇḍā* as '*vitaṇḍā*', the idea that it attacks the view of the other party being implied by the etymological significance of the name '*vitaṇḍā*' itself, which means 'that whereby a certain view is beaten or condemned'.[19] Hence it is best to accept the definition as it is given in the *Nyāya-sūtra*.

Vātsyāyana has touched upon this point in his commentary on the *Nyāya-sūtra*, 1.1.1, where be tries to show the relevance of the recognition of the sixteen *padārthas* or topics of the Nyāya system of philosophical thought. He says that all living beings, actions and sciences have a purpose (*prayojana*) in view, and tries to show what purpose there could be in the treatment of *vāda*, *jalpa* and *vitaṇḍā*. *Vāda* and *jalpa* serve distinct purposes of arriving at the truth and vanquishing an opponent respectively. In the case of *vitaṇḍā*, if the *vaitaṇḍika* states his motive (*prayojana*) declaring that such is his standpoint and such his theory, for establishing which he has recourse to the *vitaṇḍā*, then he abandons his character of a *vaitaṇḍika*, a *vaitaṇḍika* being one who does not take up any position for himself. If, on the other hand, he does not state his motive, then he becomes open to the charge of being neither a man of the world (*laukika*) nor a serious inquirer. Lastly, if in order to escape from these contingencies he declares his purpose to consist in showing the untenability of the opponent's position without establishing any position of his own, then too he becomes open to the same contingencies. To wit, when showing the untenability of the opponent's position, he has to accept the four factors mentioned above (viz. the view to be criticised and the others), and in accepting these he renounces his *vaitaṇḍikatva* (character of a wrangler), because a true *vaitaṇḍika* is one who does not accept anything. On the other hand if he does not admit these four

factors, then his assertion—that his purpose lies in showing the untenability of his opponent's position—becomes meaningless. Again, the *Nyāya-sūtra*, 1.2.3 defines *vitaṇḍā* as a statement wherein there is no maintaining of any definite standpoint. Now, if the *vaitaṇḍika* admits what is expressed by means of these sentences, then that becomes his position which he has to maintain; if, on the other hand, he does not admit what is meant by these sentences, then these sentences become absolutely meaningless and his putting them forward becomes just incoherent babbling.[20]

This is the dilemma posed before all thinkers who cannot accept the validity of any knowledge or source of knowledge.[21] Here Vātsyāyana too has put forward the arguments against the *vaitaṇḍika*'s having no position, and hence no motive; but he does not show here what motive a *vitaṇḍā* can have, though he attempts this, as seen above, in his comments on the definition of *vitaṇḍā* (NB. 1.2.3). We have seen that Uddyotakara and Vācaspati also have repeatedly stressed that the definition of *vitaṇḍā* does not mean that the *vaitaṇḍika* can have no position or thesis of his own; all that it conveys is that in a *vitaṇḍā* his purpose lies not in the maintaining of his own position but simply in showing the untenability of the opponent's position. Hence even though he admits the four factors mentioned above, he does not cease to be a *vaitaṇḍika*.

It must be remarked here that these logicians have not rightly appreciated the stand of the serious *vaitaṇḍika* who is no mere fault-finder, but is a critical philosopher who cannot admit the validity of any knowledge and therefore is unable to recognise any view or position of his own. While arguing and attacking the opponent, he may seem to take a stand, but that is no cherished view or theory of his own, but only a stand taken up for, or rather implied in, the confuting of the other view or theory. If any one were to argue in support of even this stand, he would be the first to take up the cudgels against it as he is unable to uphold any

theory since no knowledge is absolutely true. Examples of such sceptical philosophers are perhaps Sañjaya Belaṭṭhaputta, a contemporary of Buddha, and Jayarāśi Bhaṭṭa (8th cent.), the author of the *Tattvopaplavasiṁha*. In a different category would come the Mādhyamikas and later Vedāntins like Śrī Harṣa (12th century), the author of the *Khaṇḍana-khaṇḍa-khādya*, who accept some absolute reality but regard it as unknowable by empirical means of knowledge and as inexpressible in terms of words and symbols. The author of the *Nyāya-sūtra* perhaps somewhat rightly understood the spirit of such thinkers, the serious *vaitaṇḍikas*, but his commentators interpreted even the *vitaṇḍā* form of controversy as one in which some position is acceptable to the *vaitaṇḍika*. This evaluation of the serious *vaitaṇḍikas* is supported by the other definitions suggested, viz. '*pratipakṣa-hīnaḥ jalpaḥ vitaṇḍā*,' '*dūṣaṇa-mātram*', and by '*doṣa-vacana-mātram*' as given in the *Caraka Saṁhitā*, which say that *vitaṇḍā* is just criticism or is a controversy without a counter-thesis pitted against the thesis. It is rather disappointing that even Jayanta, the author of the *Nyāya-mañjarī*, who shows originality in some matters, has not thrown any new light on the concept of *vitaṇḍā*

But it is enheartening to find Udayana (10th cent.) referring to a view of one Sānātani according to whom *kathā* (debate) is four-fold, since *vitaṇḍā* is two-fold according as it is allied in respect of essential characteristics to *vāda* or to *jalpa* [*prauḍha-gauḍa-naiyāyikamate catasraḥ kathāḥ. sa pratipakṣa-sthāpanāhino vitaṇḍā* (NS. 1 2.3) *ity atra jalpavad vādasyāpi parāmarśāt. puruṣābhiprāyānurodhena caturthodāharaṇasyāpi upapatter iti Sānātaniḥ. eka evāyaṁ kathā-mārga iti bāhyāḥ. te dve api tisra eveti niyamatayā nirākṛte—Pariśuddhi*, 1.2.1.—quoted in *History of Navya-Nyāya in Mithilā*, p. 19—Dineśa-candra Bhaṭṭācārya, Mithila Institute Series, Darbhanga, 1958]. Śaṅkara Miśra (16th cent.) also refers to this view of Sānātani in his *Vādivinoda* (p. 2). It is quite possible, says Sānātani that a debater may just refute the position of the other party without establishing any thesis of his own in a debate which has

the characteristics of a *vāda*. Similarly, in the *Nyāya-pariśuddhi* of Veṅkaṭanātha (14th cent. A.D.), there is a reference to a two-fold classification of *vitaṇḍā* according as the debater criticising without establishing any position of his own is a *vītarāga* (one free from passions and selfish motives) or a *vijigīṣu* (one desirous of victory).[22] Of course, Veṅkaṭanātha does not approve of this classification since, he argues, a *vītarāga* having a craving for the discernment of truth would not be satisfied with merely criticising another view unless he reaches a conviction regarding the true nature of the thing which is being discussed. But we can confidently say that the *vītarāga vaitaṇḍika* is what we call an honest sceptic who is unable to accept the validity of any knowledge.

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Coming to the importance of controversy or debates, we may take note of the methods suggested by the author of the *Nyāya-sūtra* for the acquisition and development of true knowledge (for attaining emancipation). Besides yogic and such other practices recommended for the attainment of emancipation (*apavarga*), it is said that there should also be grasping and digestion of what one learns, revision and repeated cogitation of the knowledge attained, as also friendly discussions with persons learned in that department of knowledge (*Jñāna-grahaṇābhyāsas tadvidyaiś ca saha saṁvādaḥ*.-NS.4.2.47) * The *Nyāya-sūtra* may be speaking of knowledge leading to *apavarga*, but this is true of any department of knowledge. As Vātsyāyana explains the *sūtra*, '*jñāna*' here stands for the science of self-knowledge (*ātmavidyā-śāstra*), the '*grahaṇa*' of this consisting in studying and digesting it (*adhyayana-dhāraṇe*), and the '*abhyāsa*' (repetition of such study) meaning the carrying on of it continuously by way of study, listening to expositions and repeated cogitation (*satatakriyā-adhyayana-śravaṇa-cintanāni*). Friendly discussions (*saṁvāda*) with persons learned in that department of knowledge bring about maturity (*paripāka*) of the knowledge acquired, this maturity consisting

* Compare the recommendations of the *Caraka Saṁhitā*.

in the removal of doubt, the knowing of things not already known and the confirmation by the opinions of the learned of the conclusions arrived at by one's self. '*Saṁvāda* means '*samāya vādaḥ*', discussion for the sake of coming to an agreement, that is to say, friendly discussion. This friendly discussion should be carried on with the pupil, the teacher, companions and other distinguished persons who are well-wishers of the inquirer and are not jealous of him (*taṁ śiṣya-guru-sabrahmacārivisiṣṭa-śreyo'rthibhir anasūyibhir abhyupeyāt.* —NS. 4.2.48).

Now it it is quite likely that the other party, teacher or the like, does not always appreciate the putting forward of a counter-theory on the part of the person who is inquiring. Keeping this in view, the author of the *Nyāya-sūtra* advises that being a seeker after truth, the man should carry on discussion for the accomplishment of his purpose, even without putting forward any counter-theory (*pratipakṣahīnam api vā prayojanārtham arthitve*-NS. 4.2.49). Inasmuch as he is desirous of acquiring knowledge from the other person he should simply express a desire to learn the truth, and without trying to establish any theory of his own, he should clarify, check up or refine (*pariśodhayet*) his own view of things, especially by realising the fact that the doctrines of school-men are mutually opposed.[23] That is to say, a sincere enquirer should be patient with regard to the other party's attitude. If the other party is well-meaning but a bit intolerant and cannot stand the idea of any one's opposition, the true seeker after truth should just give a very patient hearing and argue only within the limits of the other party's thesis, without insisting on his own theory. Even this would help him to clarify, refine and even rectify several points in his own theory. Philosophers have different views and a truth-seeker would do well to understand each one of them and refine his understanding of truth.

The author of the *Nyāya-sūtra* gives a piece of advice that through excessive partiality for their own theories, some

people transgress all bounds of reasoning, and in that case one should be practical and employ *jalpa* and *vitaṇḍā* for the purpose of protecting one'e own determination regarding the real nature of things, just as the hedge of thorns is put up for the protection of sprouting seeds (*Tattvādhyavasāya-saṁrakṣaṇārthaṁ jalpa-vitaṇḍe bīja-prarohasaṁrakṣaṇārthaṁ kaṇṭaka-śākhāvaraṇavat.*—NS 4.2.50). This however is meant only for those persons who have not acquired true knowledge, whose defects have not yet been removed and who are still making an attempt for these purposes, that is to say, whose delicate grasp of knowledge requires to be tenderly nourished. Or it may happen that one is rudely addressed by the opponent either through vanity of superior knowledge, or through sheer indifference to right knowledge, or through some similar reason (for instance, for worldly gain, fame, etc.). Under such circumstances, failing to find the right answer to the ill-mannered allegations of the opponent one should pick up a quarrel with him and proceed to deal with him by means of *jalpa* and *vitaṇḍā*, with a view to defeating the opponent (*vijigīṣayā*) and not with a view to getting at the truth (*na tattva-bubhutsayā*) (*Tābhyāṁ vigṛhya kathanam*.—NS 4.2.51). But this should be done only for the purpose of protecting true knowledge when one cannot find a logical refutation of the opponent's argument and not for the purpose of obtaining any worldly gain—wealth, honour or fame. Vācaspati says that the motive prompting such a man should be that if this ill-mannered person be allowed to go undefeated, the ordinary man—king and his subjects—would accept his conclusions as the right ones and this would bring about a total chaos in *Dharma* (Rightcousness).[24]

This indicates what a high ideal of the mode of dialectic the logicians aimed at In actual practice, however, as is but natural, one would find varying degrees of the observance of the ideal. And the history of debate is full of such mixed motives. That the debate had practical results can be seen from several references to change of faith and the attainment

of royal acceptance and consequent patronage. Yet it makes all the difference whether one is motivated by the wish to determine the truth, or by considerations other than seeking or imparting truth or by mixed motives or by a sheer desire for mercenary gains. In history it has happened that religious teachers have argued against each other to save their creed, and he who has won has won royal acceptance and patronage for his creed and sect.* In the latter the desire to defeat the other party is present. Whereas in discussions between teacher and pupil, scholars of the same department of knowledge, thinkers belonging to the same school, and rarely between thinkers belonging to different schools of thought, the main purpose is supposed to be the determination of truth rather than the defeat or discomfiture of the other party. Even in such discussions, in the heat of argument, when one's ego is aroused, *chala*, *jāti*, and *nigrahasthāna* may get employed, to prove that one's stand-point is correct and one's own conviction justified. But still the desire to arrive at one conclusion, to which both parties would willingly give their approval, is uppermost here.

These distinctions of *vāda*, *jalpa* and *vitaṇḍā* are, as a matter of fact, theoretical or academic ones rather than historical ones in the sense that there actually existed such distinct modes of controversy as these. No two parties would start arguing saying, ' Let us take to *jalpa* or to *vitaṇḍā*'. All start with the avowed intention of entering on what the logicians call *vāda*, and it is only what follows that makes the difference. In fact in any actual *kathā*, the elements of *vāda*, *jalpa*, *vitaṇḍā* would be found together; as can be seen from the dialectical treatment of any problem in a *dārśanika* work.

The logicians formulated a theory of debate from actual debates, and their known or imagined motivations, and

× The case is similar to that of contending advocates in a court of justice.

classified debates into *vāda*, *jalpa* and *vitaṇḍā* on an academic basis. After these were theoretically distinguished and a criterion for legitimate or illegitimate forms of argument was discovered, the debater could detect and point out *chala*, *jāti* and *nigrahasthānas* (including *hetvābhāsas*) in arguments. Of course, where a prize is to be awarded to the winner, or when the prestige and future career of the debater depends entirely upon his victory in the debate, the debate would obviously be of the type of *jalpa*.

To sum up, *vāda* is carried on with a person who is willing to learn or to impart knowledge, while *jalpa* and *vitaṇḍā* are carried on with persons who are perverse in their ignorance and too proud to learn. Thus, whereas *vāda* aims at the ascertainment or confirmation of truth, *jalpa* aims at the establishing of a counter-thesis, and in *vitaṇḍā* even this is absent. The latter two are mainly concerned with the discomfiture of the other party, and thus they abound in the deliberate use of *chala*, *jāti* and *nigrahasthāna*. But these are not employed, or if employed only unknowingly, in a *vāda*. In *jalpa* and *vitaṇḍā*, the parties pounce upon each other and are ever ready to expose grounds of defeat or censure in the other's reasoning, whereas in *vāda* only such grounds of defeat or censure are exposed as are obstacles to the discernment of truth. Those other *nigrahasthānas*, the exposure of which tends merely to the discomfiture of the other party, are ignored in a genuine *vāda*.

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Let us now consider the view of the Buddhist and the Jaina logicians with regard to *vāda*, *jalpa*, and *vitaṇḍā*. Before Dharmakīrti, the Buddhist logicians treated *chala*, *jāti* and *nigrahasthāna* almost as the *Nyāya-sūtra* does. But we do not find anything said with regard to the types of debate. Dharmakīrti has something original to say here. He has described *jātis* (futile rejoinders) as the urging of non-existing fallacies;

thus they correspond to the *nigrahasthāna niranuyojyānuyoga*. (*Anudbhūtadoṣodbhāvanāni jātyuttarāṇīti*—*Nyāyabindu*, III. 14). In his *Vādanyāya*, Dharmakīrti has reduced the *nigrahasthānas* of the Nyāya school to only two, viz. *asādhanāṅga-vacana* (statement of what is non-essential by way of proof or non-statement of what is essential for proof), and *adoṣodbhāvana* (urging of a non-existing defect or non-urging of an existing defect).[25] And Dharmakīrti does not approve of the employment of unfair means such as *chala* in debates. When there is thus no place for unfair means in debates, the difference between *vāda* and *jalpa* loses its significance. Dharmakīrti does not also seem to recognise *vitaṇḍā* as he does not countenance any debate with the thesis devoid of a counter-thesis (*apratipakṣāyāṁ ca pakṣasiddhau kṛtāyāṁ jetā bhavati* —VN, p. 72). People, who want to prevent misunderstanding from prevailing among the people or who want to repudiate wrong beliefs and theories of others and thus are motivated by a sincere desire to confer benefits on others, would never go in for, or recommend such tricky devices as *chala* in discussion, only for the sake of attaining wealth, honour, etc. Good people do not write treatises on logic for recommending means for the attainment of worldly gains. Therefore, there is nothing like a *vijigīṣu-vāda* (or *jalpa*) carried on with the sole aim of victory, as the Naiyāyikas seem to think. Good and honest people motivated by a desire to help and guide others by teaching them the real nature of things would always follow the path of logic by stating the correct reasoning or by exposing the faults really present in the reasoning of others. *Chala*, etc. cannot be said to be employed for the preservation of the conviction of truth as the Naiyāyikas believe, because in that case, scratching, slapping, striking, setting on fire and the like could also be used for that purpose. The statement of the essential means of proof (*sādhanāṅga-vacana*) and the exposure and refutation of fallacious proofs (*doṣodbhāvana*) alone can serve to preserve the conviction of truth. Any other irrelevant statement would only

serve to pain and confuse others and would not establish the truth. Therefore, the establishing of the true position for the benefit of others is the genuine source of victory for the *vādin*, and repudiating wrong propositions by exposing the faults really present in the reasoning of the other party is the source of victory for the *prativādin* (opponent). These alone can lead to victory and not tricky devices like *chala* (*na hi tattva-cintāyāṁ kaścic chalavyavahāraḥ*—VN, p. 70).[26]

Dharmakīrti established the Buddhist position with regard to debate once for all. He discouraged the differentiation of debates as meant for determining the truth and as meant for the attainment of victory. There could be no other victory than the establishing of the truth and the repudiation of a false view with regard to the nature of a thing, this being found also in what is called *vāda* by the *Nyāya-sūtra*. He discouraged the use of *chala*, etc. in debates and the classification of debate on their basis. *Jātis* are just *adoṣodbhāvana* (urging of a non-existing defect) and therefore are a ground of defeat for the person who sets them forth. We may remark that the Naiyāyikas had in view some actual debates which were of the nature of *jalpa* or *vitaṇḍā*, and therefore their description of the different kinds of *kathā* can be called realistic, while the position of Dharmakīrti with reference to *kathā* is both strictly logical and moral.

The later Jaina thinkers too positively accepted this position. It seems that before Akalaṅka (8th cent. A.D.), the Jaina logicians did not have very great scruples regarding the use of unfair means such as *chala*, etc. if it be for the preservation and propagation of their religious and philosophical tenets, as is evident from the *Āgamas*. The *Vādopaniṣad Dvātriṁśikā*, the *Vāda-dvātriṁśikā* and the *Nyāya-dvātriṁśikā* of Siddhasena Divākara (fifth-sixth century) bear evidence to this. Haribhadra (eighth century) in his *Vāda* and *Yama Aṣṭakas* refers to three kinds of debates-*śuṣka-vāda* (dry-as-dust debate), *vivāda* (disputation) and *dharma-vāda* (righteous

debate) which correspond to *vitaṇḍā*, *jalpa* and *vāda* respectively (Haribhadra has used the word '*vāda*' in the sense of *kathā*, debate). (*Śuṣkavādo vivādaś ca dharmavādas tathā' paraḥ. ity eṣa trividho vādaḥ kīrtitaḥ paramarṣibhiḥ–Vādāṣṭaka*, 1). The debate of a good man with an arrogant, cruel, unrighteous and ignorant opponent is a *śuṣkavāda*. The debate abounding in the use of *chala* and *jāti* with a person who is not high-souled, who is ungenerous or dogmatic and who aims at material gain and fame is a *vivāda*; and the debate with a learned man, proficient in his own department of knowledge and free from any bias or dogmatic attitude is a *dharmavāda*. Alaṅka, it appears, was the first Jaina logician to state that fair means alone should be employed for just aims, that is to say, to establish the truth or the real nature of a thing, rather than an individual's opinion about it. When there is no place for unfair or illegitimate means in a debate, the difference between *vāda* and *jalpa* disappears and so for Akalaṅka, '*vāda*' and '*jalpa*' are synonymous as can be seen from his definition '*samarthavacanaṁ jalpaḥ* (—*jalpa* is a competent statement).[27] As regards *vitaṇḍā*, Akalaṅka has clearly stated that it is a semblance of *vāda* (*vādābhāsa*), not a genuine one.[28] Most of the Jaina thinkers after Akalaṅka follow him with the exception of Yaśovijaya (17th cent.) who allows the use of even unfair means in exceptional cases.[29]

We may now briefly refer to the exposition of *vāda* as given by a few Jaina logicians. Akalaṅka defines *vāda* (debate or discussion) as '*samartha-vacana*', competent statement, that is to say, statement which can establish the point at issue. Vādi Devasūri (1086–1130 A.D.), in his *Pramāṇa-naya-tattvālokālaṅkāra*, defines *vāda* as a statement constituted of proof and confutation for the purpose of the establishing of one of the two contradictory characters recognised by the respective parties as subsisting in one substratum, so as to exclude the other one (*viruddhayor dharmayor ekadharma-vyavacchedena svīkṛta-tadanyadharma-vyavasthāpanārthaṁ sādhanadūṣaṇa-vacanaṁ vādaḥ*.—PNTL 8.1). Ratnaprabhācārya says in his *Ratnā-*

karāvatārikā commentary that it is not necessary to qualify these characters as 'uncertain' or 'undetermined' (*anavasita*) as Uddyotakara does in his *Vārttika*, because though the debaters might be uncertain or in doubt as to these characters in a *vītarāga-kathā* (dispassionate debate, or what the Naiyāyikas would call *vāda*), yet in a a *vijigīṣu-kathā* (debate in which each party aims at victory by convincing the other of its own standpoint), the two parties are quite certain and even obstinate in their view regarding these characters. The debater might be one desirous of victory (*jigīṣu*) (or one who desires to determine the truth (*tattva-nirṇinīṣu*). The *jigīṣu* is one who is desirous of defeating the opposite party by proving his own thesis and refuting the reasoning of the other party for the establishing of the character recognised by him. The *tattva-nirṇinīṣu*, on the other hand, is one who similarly wants to establish the truth, the true character of a thing, e.g., eternality or otherwise in word. Such a one desirous of determining the truth might do so either for himself or for imparting it to others in order to benefit them. In the latter case, he might even be declared a victor but that is not his aim, his aim being to impart true knowledge to others. The one who desires to determine the truth for himself might be a pupil or the like. The one who wants to establish the truth for the sake of others might be a teacher or the like. He can be of two kinds, possessed of knowledge conditioned by the subsidence-cum-destruction of *karma*, or he might be a man of pure knowledge, that is to say, an omniscient person.[30]

Hemacandra (1088-1173) defines *vāda* as the statement of proof and its refutation in the presence of judges and other members of the assembly with a view to the preservation of truth (*tattva-saṁrakṣaṇārtham prāśnikādi-samakṣaṁ sādhana-dūṣaṇa-vadanaṁ vādaḥ*—PM. II. 1.30). Proof (*sādhana*) is the argument propounded by a debater (*vādin* or proponent) in order to establish his thesis, and refutation (*dūṣaṇa*) is the counter-argument set forth by his opponent (*prativādin*) in

order to disprove this thesis. This opponent also has on his part to offer proof in support of his own own thesis and the original proponent has to refute the opponent's position. Thus both the parties have their own proof and refutation, and *vāda* consists of the statement of these two sets of arguments and counter-arguments which are employed by the *vādin* and the *prativādin*.[31] Hemacandra states the purpose of such debates in the expression 'with a view to the preservation of truth'. What is meant by 'truth' is determination or conviction of truth which is uppermost in the minds of persons known for their rectitude and this has to be protected from the sophistical attacks of people arrogant of their learning.[32]

It might be urged by the Naiyāyikas that the preservation of truth is the objective of *jalpa* and *vitaṇḍā* as stated in the *Nyāya-sūtra*, 4.2.50. But it is not so. Even in *vāda* there is scope for 'checks' as can be seen from the definition of *vāda* as explained by even Vātsyāyana and others. *Vitaṇḍā* which does not aim at the establishing of the *pratipakṣa* (counter-theory) cannot be regarded as a legitimate form of debate. How could a mere *vaitaṇḍika*, who does not claim to have any position of his own and only seeks to refute the stand of his position by means of just any arguments, claim any respect or consideration ? As to *jalpa*, it has some claim to be called a legitimate debate as both the parties aim at establishing their respective positions and refuting the opponent's position, yet it cannot be given the status of a type of debate different from *vāda*. *Jalpa* and *vāda* are the same for the Jaina logician. It is not right to argue that the purpose of *jalpa* is not served by *vāda* in view of the frequent employment of *chala*, *jāti* and *nigrahasthāna* in the former. As a matter of fact, these are in no way incompatible with the concept of *vāda* also. Such devices as the use of a whip, slapping, gagging the mouth and the like cannot be regarded legitimate for securing the defeat of the opponent in a debate;

but the application of 'checks' is not in any way repugnant to the concept of *vāda*. As to the distinction that *vāda* aims at the determination and imparting of truth, whereas *jalpa* and *vitaṇḍā* aim at such gains as fame, wealth, honour, etc.,—according to Hemcandra, there can be no such water-tight compartments. Fame, wealth, honour, etc. necessarily follow upon the achievement of the primary objective, viz. the establishing of truth. As such these cannot be prevented from operating as incentives even in a dispassionate philosophical discourse since such desires and ambitions are quite natural to man. Further, it is improper to secure the refutation of the opponent by means of unfair arguments. High-souled persons do not seek to attain, as a rule, victory or fame or wealth by unfair means.

It has been contended in the *Caraka Saṁhitā* and in the Nyāya works that resort to such tactics is by no means an offence when the opponent is found to be stronger and if his victory is likely to lead to loss of religion on the part of the vanquished, and to the ignorant people being led astray, and if the proponent (*vādin*) being confused, a legitimate counter-argument does not occur to his mind. Under the pressure of circumstances, it is advisable to employ the tricky devices of debate and at least give rise to a doubt in the minds of all concerned as to the stand of the opponent, rather than be utterly defeated.[33] According to the *Jaina* logicians, this is not convincing. This only shows that the employment of sophistical refutations (*jātyuttara*) may be necessitated under exceptional circumstances. But this in no way vindicates the claim of *jalpa* to be regarded as a separate type of debate. If circumstances compel the debater to use unfair arguments even in a *vāda*, that alone cannot turn it into a different kind of debate. Thus *vāda* is the only variety of debate (*kathā*).[34]

It may be remarked that *Vādi Devasūri* recognises two kinds of *vāda*—one that of *tattva-nirṇinīṣus* and the other that of *vijigīṣus*; this comes nearest to the Nyāya classification of *kathā* (debate). The other Jaina logicians mostly look

upon *vāda* as meant for the achevement of victory; of course this victory means the establishing of the truth as one understands it, and so in theory at least is not removed from the Nyāya view. We may note that '*jaya*' (victory) has acquired a new shade of meaning, — the victory of the truth is the victory of the victor. The Buddhist and the Jaina logicians, admitting only one type of debate, take note of *chala*, and *jāti* as things of practice, but among them Dharmakīrti, Akalaṅka and Vidyānanda are specifically against their use in a debate. We have seen that if the Naiyāyikas admit 'checks' (exposure of *nigrahasthānas*) in a *vāda*, it is only to correct the reasoning of the *prativādin* in order that he may abstain from such failings and not in order to take advantage of them and expose or defeat him, as is done in *jalpa* (and *vitaṇḍā*). Can it be said that the important distinction, which might have been mostly academic, between *vāda* (which is conducted for the pursuit of truth and the imparting of it to others, with no eye on material gain by persons having a purely scientific interest and inspired by the craving to know and impart the truth, as can be seen in the *Upaniṣads* and the Buddhist *Piṭakas* and the Jaina *Āgamas*), and *jalpa* (which has a material gain in view) faded into insignificance in the later period when, royal patronage was sought through success in debates and religious and philosophical controversies and such debates were frequent occurrences in royal courts ? Vādi Devasūri, it is well known, participated in many a debate or discussion with a view to refuting the rival thinker. Nevertheless, we find the logicians striving to maintain purity of purpose in debates by stressing that victory primarily means a establishing of truth as one understands it, though material gains may follow as a matter of course, and though even the high-souled person uses tricky devices to defeat the opponent. Of course, purely academic debates and discussions among the teacher and the disciples, or among equals or sometimes among teachers of different schools are not ruled out even here.

We may now refer in passing to the view of Śrī Harṣa with regard to *vāda*, *jalpa* and *vitaṇḍā*. He does not admit *jalpa* as a distinct kind of debate; it is an amalgamation of two *vitaṇḍās*. The *vādin* states his position and the *prativādin* refutes it; this is one *vitaṇḍā*. Then the *prativādin* tries to establish his own view and the *vādin* refutes it; this is the other *vitaṇḍā*, the amalgamation of these two being called *jalpa* by the Naiyāyikas Many schools do not admit *jalpa* as a distinct variety of *kathā*. If two *vitaṇḍās* can be called *jalpa*, then the amalgamation of two *jalpas* should be considered a distinct variety of *kathā*, and there would be no end to the divisions of *kathā*. It may be urged against this that in that case *vāda* also should be regarded as an amalgamation of two *vitaṇḍās* and then *vitaṇḍā* would be the only type of debate. Śrī Harṣa's answer to this is that there is a distinction between the purpose of *vāda* on the one hand, viz. determination of truth, and of *jalpa* and *vitaṇḍā* on the other hand, viz. victory. Hence *jalpa* can be included in *vitaṇḍā*, but not *vāda*. Śrī Harṣa says that this has been discussed at length in another work viz. '*Īśvarābhisandhi*';—but this work is unfortunately not extant.[35]

Veṅkaṭanātha has referred disapprovingly to this view in his *Nyāya-pariśuddhi*.[36] He classifies *kathā* into *vītarāga-kathā* and *vijigīṣu-kathā*, the former being called *vāda*, and the latter being further classified as *jalpa* and *vitaṇḍā*. Veṅkaṭanātha's view does not substantially differ from that of the Naiyāyikas.[37]

NOTES

1 Avayaveṣu pramāṇatarkāntarbhāve pṛthak pramāṇatarkagrahaṇaṁ sādhanopālambha-vyatiṣaṅga-jñāpanārtham. anyathobhāv api pakṣau sthāpanā-hetunā pravṛttau vāda iti syāt. antareṇā'pi cāvayavasambandhaṁ pramāṇāny artham sādhayantīti dṛṣṭam, tenāpi kalpena sādhanopālambhau vāde bhavataḥ iti jñāpayati.—NB. 1.2.1.

2 Chala-jāti-nigrahasthāna-sādhanopālambho jalpa iti vacanād vinigraho jalpa iti mā vijñāyi, chala-jāti-nigrahasthāna-sādhanopālambha eva jalpaḥ, pramāṇa-tarka-sādhanopālambho vāda eveti mā vijñāyīty evamartham pṛthak pramāṇa-tarka-grahaṇam iti.—NB. 1.2.1.

3 Tarkānugṛhītapramāṇamūlā avayavāḥ paramārthato bhavantu mā bhuvan, vādi-prativādinos tv abhiprāyo bhavati pramāṇamūlā avayayā iti, etāvataiva pramāṇa-tarka-sādhanopālambhatā, vādasya vītarāgakathātvena tattva-nirṇayāvasānatvāt, jalpa-vitaṇḍayos tv apramāṇamūlatvaṁ viduṣā'pi prativādinā chalādibhiḥ pratyavastheyam ekāntaparājayād varaṁ saṁśayo's tv itīcchatā jigīṣuṇā—NVTT, p. 315.

4 Kathaṁ punaḥ tarkeṇa sādhanam upālambhaś ca apramāṇatvāt—pramāṇānugrāhakatvāt na pramāṇa-saṁgṛhītas tarko na pramāṇāntaram ity uktaṁ, so'yaṁ apramāṇātmakaḥ san kathaṁ siddhyupālambhayoḥ kāraṇaṁ bhaviṣyati ? Na brūmas tarkaḥ siddhyupālabdhyoḥ kāraṇam api tu pramāṇa-viṣaya-vivecanāt tarkaḥ pramāṇāny anugṛhṇātīti tarkaviviktaṁ viṣayaṁ pramāṇāni pravartamānāni paricchindanti. so'yaṁ pramāṇānām anugrāhakatvāt pramāṇasahito vāde' padiṣṭa iti—NV, p. 147.

5 Pramāṇa-tarka-sādhanopālambhaḥ ity abhidhānād vāde'pi nigrahasthānānīty adoṣaḥ—NV, p. 149.

6 Kasmāt punar ayaṁ niyamo vāde avayavābhāso' pasiddhāntaś ca nigrahasthānam iti ? Gurvādibhiḥ vādopadeśān niyamaḥ—yasmād ayaṁ tattvabubhutsur gurvādibhiḥ saha trividhaṁ phalam ākāṅkṣan vādaṁ karoti tato'sya tattvabubhutsāvatas tāvat sādhanaṁ vaktavyaṁ yāvad anena jñātavyam apratidvandvitvāt. pratidvandvinā saha na vādaḥ kiṁtu jalpaḥ tatra samasta-nigrahasthānaprayoga iti yuktam.—NV, p. 149.

Na khalv apratibhādyudbhāvanaṁ tattva-pratipattāv upayujyate adhikaṁ tu na yady api tattvapratipattiṁ sākṣād vyāhanti tathā'pi tatprayojanānusaraṇe paraḥ pratipattā samākulitabuddhiḥ na tattvaṁ pratipattum arhatīty adhikasyāpi tattvapratipatti-vighāta-hetutvam iti —NVTT, p. 316.

Trividhaṁ phalam iti. anadhigata-tattvāvabodhaḥ saṁśayanivṛttir adhyavasitābhyanujñānam iti phalāni trīṇi. pratidvandvini tu na vādo'pi tu jalpa-vitaṇḍe—NVTT, p. 316. See also *Nyāya-Mañjarī*, II, p. 151 (Kashi Sanskrit Series, 1936).

7 See NV, pp. 149–150.

8 Vāde' bhiprāyaḥ niyamyate vādi-prativādinoḥ, prāmāṇikadhiyā sādhanopālambhau tābhyām prayoktavyau, nāprāmāṇikadhiyā jalpa-vitaṇḍayor iva, na punar vastu niyamyata iti, tathā ca vāde buddhipūrvaṁ chalādiprayoge tadudbhāvanam api sambhavati, tāvad eva codbhāvyaṁ

yāvaty anudbhāvite tattva-pratipatti-vyāghātaḥ, yasmiṁs tv anudbhāvite'-pi na tattvapratipatter vyāghātaḥ tat prayuktam api nodbhāvanīyam. —NVTT, p. 316.

9 See NV, pp. 150 ff.

10 See NB, 1.2.2.

11 See NV, pp. 161-162.

12 Kimarthaṁ tarhi prayogaḥ? yady etāni chala-jāti-nigrahasthānāni sādhanopālambhayor na sādhanam aṅgaṁ vā kimartham eteṣām upapādanam iti? sādhanavighātārthaṁ—sādhanaṁ vihaniṣyāmīty anayā dhiyā'pahṛtaḥ pravartate. yatra caitāni chala-jāti-nigrahasthānāni prayujyante na sa vādaḥ. na punar etad abhidhīyate chala-jāti-nigrahasthānāni sādhanam aṅgāni veti, sādhu-sādhanopādāne ca pareṇākulitabuddhiḥ chalādīni prayuṅkte kadācic chalādibhir ākulīkṛtasya parājayo'-pi syāt. Na punar etāni tattva-bubhutsunā vaktavyāni, kiṁ tu vijigīṣuṇeti. —NV, pp. 162.

13 Na hi sahasreṇāpy andhaiḥ pāṭaccarebhyo gṛhaṁ rakṣyate ity arthaḥ. evam ākṣipte pārśvasthaḥ pṛcchati **kimartham tarhiti**. siddhāntina uttaraṁ **sādhaneti**. vāde tāvad yady api na sādhana-vighātasamarthāni tathāpi teṣāṁ tattvam avidvān ebhir asya sādhanaṁ vihaniṣyāmīty anayā buddhyā'pahṛto vyāmohitaḥ, tasmād vāde bhrameṇopādānam eṣām ity arthaḥ. yatra tv eṣāṁ tattvaṁ vidvān pravartate na sa vādaḥ, kiṁ tu jalpaḥ vitaṇḍā vety āha......tad anena prakāreṇa tattvasaṁrakṣaṇārthatvāt jalpe sadācāro na ca śāstrakārāṇāṁ chalādi-vyutpādanam asadṛśaṁ, na ca ghaṭa-paṭādyabhidhāna-prasaṅgaḥ, vāg-yuddhe teṣām aprasaṅgād iti—NVTT, pp 328-329.

14 Bhāṣyam idānīm kathaṁ? Na. sūtrapāṭhānukramajñāpanārthatvād bhāṣyasya—etasmin sūtre yad upapannaṁ lakṣaṇatvena tad atidiśyate iti—NV, p. 161. **Yad upapannam**—Uktamātram ity arthaḥ.—NVTT, p. 328. See NV, 160-161. This is a good example of *pariṣkāra* or clarification done by later commentators.

15 So'yaṁ pakṣa-pratipakṣa-parigrahaś chala-jāti-nigrahasthāna-prayogāprayogābhyāṁ bhidyamāno vādo jalpo vitaṇḍā ca bhavati—NV, p. 162.

16 Pūrvavādipakṣāpekṣayā prativādinaḥ ātmīya eva pakṣaḥ pratipakṣaḥ—NVTT, p. 329; pratipakṣo dvitīyapakṣaḥ—Viśvanātha's *vṛtti* on NS 1.2.3.

17 Yad vai khalu tat parapratiṣedha-lakṣaṇaṁ vākyaṁ sa vaitaṇḍikasya pakṣah, na tv asau sādhyaṁ kaṁcid arthaṁ pratijñāya sthāpayatīti. tasmād yathānyāsam evāstv iti—NB, 1.2.3.

18 Vaitaṇḍiko'pi hi vādī pāriśeṣyān matpakṣah setsyatīti buddhyā svapakṣam asthāpayan parapakṣa-sthāpanam āhanti, tasmāt **parapakṣapratiṣedha-lakṣaṇaṁ vākyam asya pakṣaḥ** parapakṣaniṣedhena pāriśeṣyāt pakṣasiddhihetutvād upacaritaḥ. tasmād asti vaitaṇḍikasya pakṣo na tu parapakṣa-pratiṣedhād anyā sthāpanā, tenāsya pakṣo'sti nāsti tu pakṣasthāpanā, tad idam uktam **na kaṁcid arthaṁ pratijñāya sthāpayatīti** pakṣatvaṁ tu tadyogyatāmātreṇa, na tu sthāpyamānatayeti.—NVTT, pp. 329-330.

19 Apare tu bruvate dūṣaṇamātraṁ vitaṇḍeti—dūṣaṇamātram iti mātraśabdaprayogād vaitaṇḍikasya pakṣo'pi nāstīti. ayuktaṁ caitat caturvargasyābhyupagamāt; dūṣaṇam abhupagacchan dūṣyam abhyupaiti ayathārthāvabodhaṁ pratipadyate pratipādayitāraṁ pratipattāraṁ ca; dūṣaṇamātrābhyupagame sati sarvam etan na syāt dūṣaṇamātrābhyupagamāc cheṣam arthato'vagamyate iti vitaṇḍā vitaṇḍeti vaktavyaṁ—yayā vitaṇḍyate sā vitaṇḍety anugatārthayā saṁjñayaiva parapratipatti—vighātaḥ kriyate iti—NV, p. 163, See also NVTT, p. 330.

20 See NB. 1.1.1; also NV, p. 14.

21 See *Khaṇḍana-khaṇḍa-khādya* (beginning), and pp. 138–140. Nāgārjuna's *Vigrahavyāvartanī* (*pūrvapakṣa*); and Candrakīrti's *Vṛtti* on the *Mādhyamika-kārikā*, pp. 34,55ff.

22 Kecit tu vitaṇḍāyām api vītarāga-vijigīṣubhedād bhedam āhuḥ.—NP, p. 166.

23 Parataḥ prajñām upāditsamānas tattvabubhutsā-prakāśanena svapakṣam anavasthāpayan svadarśanaṁ pariśodhayed iti. anyonyapratyanīkāni ca prāvādukānāṁ darśanāni—NB. 4.2.49.

24 Vigṛhyeti vijigīṣayā na tattva-bubhutsayeti. tad etad vidyāpālanārthaṁ na lābha-pūjā-khyātyartham iti—NB. 4.2.51. Yas tu svadarśana-vilasita-mithyājñānāvalepa-durvidagdhatayā sadvidyā-vairāgyād vā lābha-pūjā-khyātyarthitayā kuhetubhir īśvarāṇāṁ janādhārāṇāṁ paralokādi-dūṣaṇa-pravṛttas taṁ prativādī samīcīna-dūṣaṇam apratibhayā'paśyan jalpa-vitaṇḍe avatārya vigṛhya jalpa-vitaṇḍābhyāṁ tattva-kathanaṁ karoti vidyā-paripālanāya. mā bhūd īśvarāṇām mati-vibhrameṇa taccaritam anuvartinīnāṁ prajānāṁ dharma-viplava iti. idam api prayojanaṁ jalpa-vitaṇḍayoḥ. na tu lābhakhyātyādi dṛṣṭam. na hi parahita-pravṛttaḥ parama-kāruṇiko munir dṛṣṭārthaṁ parapāṁsulopāyam upadiśati iti.—NVTT, pp. 668-669.

25 Asādhanāṅgavacanam adoṣodbhāvanaṁ dvayoh.
nigrahasthānam anyat tu na yuktam iti neṣyate.—VN, 1.

26 Chala-vyavahāro'pi vijigīṣūṇāṁ vāda iti cet. na. durjanavipratipattyadhikāre satāṁ śāstrapravṛtteḥ. na hi parānugrahapravṛttā mithyā–

pralāpārambhāt sotkarṣa-parapaṁsanādīn asadvyavahārān upadiśanti. na ca paravipaṁsanena lābha-satkāra-ślokopārjanaṁ satām ācāraḥ. na'pi tathāpravṛttebhyaḥ svahastadānena prāṇināṁ upatāpanaṁ satsammatānāṁ śāstrakāra-sabhāsadāṁ yuktam. na ca nyāya-śāstrāṇi sadbhir lābhādyupārjanāya praṇīyante. tasmān na yoga-vihitaḥ kaścid vijigīṣuvādo nāma. parānugraha-pravṛttās tu santo vipratipannaṁ pratipādayanto nyāyam anusareyuḥ satsādhanābhidhānena bhūtadoṣodbhāvanena vā. sākṣi-pratyakṣaṁ tasyaivānuprabodhāya tad eva nyāyānusaraṇaṁ satāṁ vādaḥ. uktanyāye tattvārthī cet pratipadyeta. tadapratipattāv apy anyo na pratipadyeteti. tattva-rakṣaṇārthaṁ sadbhir upahartavyam eva chalādi vijigīsubhir iti cet, nakha-capeṭa-śastraprahārādīpanādibhir apīti vaktavyam. tasmān na jyāyān ayaṁ tattvarakṣaṇopāyaḥ. sādhana-prakhyāpanaṁ satām tattvarakṣaṇopāyaḥ sādhanābhāsa-dūṣaṇaṁ ca tadabhāve mithyāpralāpād atra paropatāpavidhāne'pi tattvapratiṣṭhapanāt anyathāpi nyāyopavarṇane vidvat-pratiṣṭhānāt. tasmāt parānugrahāya tattvakhyāpanaṁ vādino vijayo, bhūtadoṣadarśanena mithyā-pratipattinivartanaṁ pratipādinaḥ—VN, p. 71.

27 Samartha-vacanaṁ jalpaṁ caturaṅgaṁ vidur budhāḥ.
pakṣa-nirṇaya-paryantaṁ phalaṁ mārga-prabhāvanā.

vādinaḥ tattva-pratipādana-sāmarthyam antareṇa yathaivonmārgaśodhanena mārga-prabhāvanā na sambhavati evaṁ pariṣad-balasya yathārhaṁ satyadoṣa-nivedana-sāmarthye'sati. svayam evoddhṛtya nyāyavādinām api vyāpāra-vyāhārābhyāṁ pratikṣipatāṁ darśanāt svayam auddhatya pracchādanārthaṁ chala-jāti-nigrahasthānānaṁ bhedo lakṣaṇaṁ ca neha pratanyate taiḥ sādhanopālambho jalpa iti kaiścil lakṣaṇāt tataś caturaṅga eva jalpaḥ vacanasyāpi sāṅkaryaṁ tadanyatara-tattvetara nirṇayāvasānam eva, na punaḥ vaktrabhiprāya-sūcanam. sādhana-dūṣaṇa-tadābhāsa-vyavasthāyāḥ vastu-tattva-pratibandhāt, vaktrabhiprāya-sūcanābhidhānasya sarvatrāviśeṣāt—SV with *vṛtti*, V. 2.

28 Pratyanīka-vyavaccheda-prakāreṇaiva siddhaye,
vacanaṁ sādhanādīnāṁ vādaḥ so'yaṁ jigīṣatoḥ.
āstāṁ tāvad alābhādir ayam eva hi nigrahaḥ,
nyāyena vijigīṣūṇāṁ svābhiprāyanivartanaṁ.
tadābhāso vitaṇḍādir abhyupetāvyavasthiteḥ,
tadātmotkarṣaṇāyaiva vācovṛttir anekadhā.
Ny. V, II. 382-384.

See TŚlv, pp. 278-279; and Tasmāj jalpa-vitaṇḍā-nirākaraṇena vāda evaikaḥ kathā-prathāṁ labhate iti sthitaṁ—*Svopajña vṛtti* on PM. II. 1. 30.

29 Ayam eva vidheyas tat tattvajñena tapasvinā,
deśādyapekṣayā' nyo pi vijñāya guru-lāghavam.
Vāda-dvātriṁśikā, VIII. 6, of Yaśovijaya.

30 Prārambhakaś cātra jigīṣuḥ tattva-nirṇinīṣuś ca. svīkṛtadharma-vyavasthāpanārthaṁ sādhana-dūṣaṇābhyāṁ paraṁ parājetum icchur jigīṣuḥ. tathaiva tattvaṁ pratiṣṭhāpayiṣus tattvanirṇinīṣuh. ayaṁ ca dvedhā svātmāni paratra ca. ādyaḥ śiṣyādiḥ dvitīyo gurvādiḥ. ayaṁ dvividhaḥ kṣāyopaśamikajñānaśālī kevalī ca. etena pratyārambhako'pi vyākhyātaḥ. —PNTL, 8.2.9. *Prārambhaka*=proponent; *pratyārambhaka*=opponent.

31 Svapakṣa-siddhaye vādinaḥ sādhanaṁ tat-pratiṣedhāya prativādino dūṣaṇam prativādino'pi svapakṣasiddhaye sādhanaṁ tat-pratiṣedhāya vādino dūṣaṇam. tad evaṁ vādinaḥ sādhana-dūṣaṇe prativādino'pi sādhana-dūṣaṇe tayor vādi-prativādibhyāṁ vadanam abhidhānaṁ vādaḥ —PM. II. 1.30, *Svopajña-vṛtti*.

32 Tasya phalam āha tattva-saṁrakṣaṇārthaṁ, tattva-śabdena tattva-niścayaḥ sādhujana-hṛdaya-viparivartī gṛhyate tasya rakṣaṇaṁ durvidagdha-jana-janita-vikalpa-kalpanāt iti—Ibid.

33 See NV, pp. 529-530; NVTT, pp. 354, 672.

34 Nanu chala-jāti-prayogo'saduttaratvād vāde na bhavati, jalpe tu tasyānujñānād asti vādajalpayor viśeṣaḥ. yad āha—

duḥśikṣita-kutarkāṁśaleśa-vācālitānanāḥ,
śakyāḥ kim anyathā jetuṁ vitaṇḍāṭopa-paṇḍitāḥ.
gatānugatiko lokaḥ kumārgaṁ tat-pratāritaḥ,
mā gād iticchalādīni prāha kāruṇiko muniḥ.

iti. naivam; asaduttaraiḥ para-pratikṣepasya kartuṁ ayuktatvāt; na hy anyāyena jayaṁ yaśo dhanaṁ vā mahātmānaḥ samīhante. atha prabala-prativādi-darśanāt taj-jaye dharmadhvaṁsa-saṁbhāvanāt pratibhākṣayeṇa samyag-uttarasyāpratibhāsād asaduttarair api pāṁśubhir ivāvakirann ekānta-parājayād varaṁ sandeha iti dhiyā na doṣam āvahatīti cet, na, asyāpavādikasya jātyuttara-prayogasya kathāntara-samarthana-sāmarthyābhāvāt. vāda eva dravya-kṣetra-kāla-bhāvānusāreṇa yady asaduttaraṁ kathaṁcana prayuñjīta kim etāvatā kathāntaraṁ prasajyeta ? tasmāj jalpa-vitaṇḍā-nirākaraṇena vāda evaikaḥ kathā-prathām labhate iti sthitam—PM, II. 1.30, *Svopajñavṛtti*, p. 64.

See also TŚlv, pp. 278–80, PKM, pp. 645-648; NKC, pp. 338-339. *Siddhi-viniścaya-ṭīkā*, pp. 314 ff of Anantavīrya.

35 Jalpas tv ekā kathā na sambhavaty evā'sāmayikī, vitaṇḍā-dvaya-śarīratvāt. anyathā jalpa-dvayenāpi kim ity ekā kathā na kalpyate; avocāma ca jalpa-vicāra-prastāve vistareṇaitad iti—KhKh, p. 140–141.

36 Kecit tu vitaṇḍādvayaṁ eva vyatyastaṁ jalpa iti vadanti tathāpi tathaiva niyamāt kathātraya-gaṇanaṁ nānupapannam—NP, p. 168.

37 See NP, pp. 165–169.

CHAPTER V

TRICKY DEVICES OF DEBATE

—*Chala* (Quibble), *Jāti* (Sophistical refutation)

Chala (quibble), according to the *Nyāya-sūtra*, consists in opposing a proposition by assigning to it a meaning other than the one intended (*vacana-vighāto'rthavikalpopapattyā chalam*-NS 1.2.10). That is to say, a certain proposition, containing a word which has a wide range of meaning or which conveys more than one meaning, having been set forth, if opposition is offered to it by imposing upon it a meaning other than that intended by the speaker, that is an instance of *chala* or quibble.[1]

Chala is of three kinds—(*a*) *vāk-chala* (verbal quibble). (*b*) *sāmānya-chala* (generalising quibble), and (*c*) *upacāra-chala* (figurative quibble).[2] Of these, Verbal Quibble (*vāk-chala*) consists in assuming a meaning other than that intended to be conveyed by the speaker, when the meaning intended is not definitely specified (*aviśeṣābhihite'rthe vaktur abhiprāyād arthāntarakalpanā vāk-chalam.*-NS. 1.2.12). To take an example, when one says '*Navakambalo'yaṁ māṇavakaḥ*', what the speaker means is, 'The young boy is one whose blanket is new' (*navaḥ kaṁbalo yasya sa nava-kaṁbalaḥ*). But the compound '*nava-kaṁbalaḥ*' is ambiguous and conveys more than one meaning, and what the *chalavādin* (quibbler) does is to assign to the compound a meaning other than that intended by the speaker, viz. 'The young boy is one who has nine blankets' (*nava kambalāḥ yasya saḥ*).[3] Having thus thrust upon the man an idea that he did not intend to convey, he proceeds to oppose the proposition by showing its absurdity—'This boy has only one blanket; how could he have nine blankets? (*eko'sya*

kambalaḥ kuto nava kambalā iti). Thus this is *chala* urged on the occasion of the use of an ambiguous word; being based upon a word, it is called verbal quibble (*vāk-chala*).

This *chala* can be met with by saying that there are no special circumstances favouring the opponent's interpretation also. Hence the opponent's attack is a false and futile one. Further, the connection of a word with its denotation is well known in the world to consist in the conventional restriction of a certain word as having a certain denotation; and this conventional restriction is found to be general in the case of general terms, and particular in the case of particular terms; and whenever these words are used they are used according to previous usage and never in a way in which they have never been used before; the use of a word again is only for the purpose of making it understood, and it is only when the meaning has been comprehended that there can follow any activity from the hearing of the words. At the time that the exact meaning of a word is fixed by convention for the first time, it is not said to pertain to any particular individual, the denotation fixed being entirely generic in character; and the word comes to be applied to particular individuals only through the force of such circumstances as the particular context in which the term is used, the particular person using it, the particular person to whom it is addressed and the time and place of the usage, and so on. For instance, when such expressions are used as 'Take the goat to the village' 'Bring ghee', 'Feed the brāhmaṇa', every one of these words 'goat', 'ghee', 'brāhmaṇa' is a general or common term, and yet it is used in actual usage for particular individuals of the class denoted by the term; and for what particular individual it is used is determined by the concatenation of circumstances. The term is used for that particular individual (goat, for example) with which it is possible to connect the particular activity (of taking to the village, for instance), it being impossible to take all goats that are there in the world to the village, though goat is a general term for all goats. Similarly, here '*nava-*

kaṁbalaḥ ' is a general term and as such it is used to be taken to apply to that to which it has the capability (*sāmarthya*) to apply, under the circumstances; thus when it is used with reference to a person having one new blanket, it should be taken to mean ' one having a new blanket ', and the possession of nine blankets being found impossible, the expression cannot signify ' one who has nine blackets '. And if a meaning be assigned to the opponent's expression that it cannot possibly convey, the attack must be regarded as entirely futile and false.[4]

Uddyotakara says that the expression ' This boy is *nava-kaṁbala* ' is an example of an ambiguous or general sentence; the word ' *aśvaḥ* ' is an instance of an ambiguous or general word, which when taken as a noun denotes the horse, and when taken as a verb means ' You have become fat ', ' *aśvaḥ* ' being the First Preterite, second person singular form of $\sqrt{\text{śvi}}$. Uddyotakara further clarifies that the term '*artha*' (meaning) is used in the definition to preclude *śabda* (word) as *chala* always pertains to the meaning of the words and not to the words themselves. For instance, the *chalavādin* cannot say, " The word that you are using is not '*navakaṁbala*' "; but he can certainly impose a meaning not intended by the speaker.

Uddyotakara suggests that the *vāk-chala* should be answered in the following manner :—Whether the opposition is offered knowingly or unknowingly, in either case it is highly improper. If the *chalavādin* knows what the term ' *nava-kaṁbala* ' means in a particular context and yet he urges that the boy is not *nava-kaṁbala*, then he urges something irrelevant, foreign to the subject and thus becomes subject to the ' check ' *arthāntara* (irrelevancy) because he apprehends one meaning and urges another. If on the other hand while opposing he does not know what the word actually means he becomes subject to the check *ajñāna* (ignorance).[5] This mode of meeting a *chala* applies to all the three kinds.

(a) Generalising Quibble (*sāmānya-chala*) consists in the

assumption of an absurd meaning, which is rendered possible by the use of a too generic term (*sambhavato'rthasyā'tisāmānya-yogād asambhūtārthakalpanā sāmānyacchalam*—NS. 1.2.13). To take an example, when one man says, "Oh, this brāhmaṇa is endowed with learning and moral character", and another replies, "Learning and moral character are quite natural to a brāhmaṇa", the latter assertion is objected to and opposed by assigning to the word 'brāhmaṇa' a meaning other than the one intended, as a matter of fact, a very absurd meaning. The opposition is in the form, "If learning and moral character are natural to the brāhmaṇa, then these must be found in a *vrātya* (brāhmaṇa who has not gone through the rites and ceremonies essential for all brāhmaṇas) also, as he too is a brāhmaṇa". The *chalavādin* takes the term 'brāhmaṇa' in a too generic sense; that word is called too generic which while applying to what is spoken of also goes beyond it; for instance 'brāhmaṇa-hood' denoted by the term 'brāhmaṇa' is sometimes found to be concomitant with learning and moral character and sometimes to go beyond it, that is to say, not to be concomitant with it. As the opposition offered is based upon the too generic character of the terms used, it has been called '*sāmānyacchala*'.[6]

This *chala* can be met by pointing out that what the speaker of the second sentence intends is not to give a reason for what the previous speaker had said with regard to a particular brāhmaṇa being endowed with learning and moral character, but only to make a reference to what was stated in the previous sentence, by way of mere praise of the particular brāhmaṇa mentioned in it; so there is no scope for the assumption of an absurd meaning. For example, when we say, "Rice grows in this field" and another says, "Even seeds have not to be sown in this field", this is not meant to deny seeds as the cause of rice (—only they are not to be mentioned as such); the intention is only to praise the fertility of the soil of the field. Similarly here by the statement, "Learning and moral character are only natural to the brāhmaṇa", what is meant

is that the particular brāhmaṇa possesses learning and moral character and not that he possesses them because he is a brāhmaṇa. The statement is only a reference to a particular object, which it is meant to eulogise. The meaning is that it is because the man is a brāhmaṇa that the causes bringing about learning and moral character have become effective. Thus when the man praises the particular object he does not deny the operation of causes leading up to the result, viz. qualities that make the object worthy of praise. And so it is not right to offer opposition to the statement by assigning to it an impossible or absurd meaning.[7] The opposition is further subject to the two 'checks' *arthāntara* and *ajñāna* as explained above.

(c) Figurative Quibble (*upacāra-chala*) consists in the denial (on the basis of the primary denotation of words) of the existence of that which is described on the basis of the secondary or figurative meaning of words (*dharmavikalpa-nirdeśe'-rthasadbhāva-pratiṣedha upacāracchalam*—NS. 1.2.14).[8] A word has a two-fold meaning—the primary and the secondary; e.g. the word 'platform' primarily signifies a structure erected by bringing together pieces of wood; but when in the statement, 'The platforms are shouting' (*Mañcāḥ krośanti*), this primary meaning is found to be incompatible due to the impossibility of the act of shouting belonging to the wooden structure, the word is applied figuratively to the persons seated on the structure, in whose case shouting is possible. This is how words are ordinarily used. Now if one were to object to the statement by assigning to it a meaning (–the primary one–) other than that which is intended (–viz. the secondary one–), it would be a case of Figurative Quibble (*upacāra-chala*) which is so called as it pertains to the figurative or secondary meaning of words.[9]

This *chala* can be answered by saying that whenever a statement is made, one can agree with it or oppose it, concur with or oppose the use of words only in keeping with the meaning intended to be conveyed by the speaker making that

statement—according as he uses the words in their primary or secondary sense. It is not proper to impose one's own interpretation on the original statement. Here the speaker uses the term 'platforms' in the secondary sense, and the opponent takes exception to it in view of the primary sense of the term. This is not the right mode of denial, but only an arbitrary one; in fact, it is no criticism at all.[10] Opposition on the basic of *upacāra-chala* is subject to the 'check' *arthāntara* or *ajñāna*.

Some are of the opinion that *upacāra-chala* does not differ from *vāk-chala* inasmuch as in both a different meaning from that intended by the speaker is assigned.* But the *Nyāya-sūtra* says that this is not true as there is difference between the two; in *vāk-chala* there is the assumption of a different meaning, whereas in *upacāra-chala*, there is the total denial of the presence of the thing denoted. Uddyotakara explains this by saying that in *upacāra-chala*, what is denied is the existence of the thing denoted, e.g. there are no such things as shouting platforms; whereas in *vāk-chala*, the presence of the thing itself is admitted, the possession by the boy of the blanket being accepted, and what is denied is only the blankets' property of numerousness. Thus in one case the thing is denied, while in the other the property is denied. Udayana rightly remarks that this is not true, because the shouting is as much a property of the platform as the numerousness is of blankets. Earlier Vācaspati tried to save Uddyotakara's position by saying:—"In the sentence 'the platforms are shouting', the shouting is predicated of the platforms, so the shouting is the predominant factor and platform the subordinate one; and that is why the secondary figurative usage applies to platform and not to shouting; hence when the *chalvavādin* offers his opposition in the words, 'the platforms certainly do not shout', what is denied is the shouting which is the predominant factor. This is what is meant by

* The *Caraka Saṁhitā* and the *Upāyahṛdaya* (p. 15) regard *vāk-chala* and *upacāra-chala* as one, or as different sub-varieties of one.

the *Vārttika* saying that the thing itself is denied. On the other hand, in the case of the statement 'This boy is *nava-kaṁbala*', '*nava-kaṁbala*' is predicated of the boy and what the *chala-vādin* denies is not the entire '*nava-kambala*' but only the qualifying part of it, viz. '*nava*'. Thus, in the former case the entire predicate, and in the latter only a part of it is denied. This is the difference between *upacāra-chala* and *vāk-chala*, which is not negligible.[11] We can differentiate between them by saying that *vāk-chala* is based on *śabda-śleṣa* or pun on words, and *upacāra-chala* on the primary (*abhidhā*) and the seeondary meaning (*lakṣaṇā*) of words. If *vāk-chala* and *upacāra-chala* be regarded as non-different, argues the *Nyāya-sūtra*, on the ground of some kind of similarity then one may as well accept only one kind of *chala*, because all types of *chala* have this in common that in them a proposition is opposed by assigning to it a meaning other than the one intended by the person setting forth the proposition.[12]

Among the Buddhist works on logic, we find the *Upāya-hṛdaya* (pp. 14–16), giving a two-fold classification of *chala* into *vāk-chala* and *sāmānya-chala*, *upacāra-chala* being included in *vāk-chala.* * Dharmakīrti does not approve of the employment of *chala* in serious debates meant for investigation into truth or the true nature of a thing. (*Na hi tattva-cintāyāṁ kaścic chalavyavahāraḥ*—VN, p. 70). The Jaina logicians also recognise the same three varieties of *chala* as the Naiyāyikas do, though they do not approve of their use by persons who rely on the sources of true knowledge (*chalāni tu bāla-krīḍāprāyāṇi na prāmāṇikānām avalambayitum ucitāni*—*Nyāyakumudacandra*, p. 339). Hemacandra says that cases of *chala* can be subsumed under *jāti*, as they lack the character of a sound answer (*chalam api ca samyag-uttaratvābhāvāj jātyuttaram eva*—PM, *Svopajña-vṛtti*, II 1.29, p. 62). *Chala*,

* The *Upāyahṛdaya* (p. 14) mentions *vāk-chala* and *sāmānya-chala* along with *saṁśaya-sama*, *kālātīta*, *prakaraṇa-sama*, *varṇya-sama*, *savyabhicāra* and *viruddha*, as different kinds of *hetvābhasas* (fallacies of reasoning).

like *jāti*, cannot bring about the defeat of the other party as it is not a sound answer.[13]

Śaṅkara Miśra (16th cent.), a later logician of the Brāhmaṇical tradition, has given a detailed exposition of *chala* in his *Vādivinoda* (pp. 20–21). He recognises the same three varieties of *chala*—*vāk-chala*, *sāmānya-chala* and *upacāra-chala.* He further regards *vāk-chala*, as three-fold according as it pertains to a thing (*dharmin*) or to its quality or epithet (*dharma*) or to both, each of these being again three-fold according as the *chala* pertains to the thesis (*pratijñā*), reason (*hetu*) or illustration (*dṛṣṭānta*). *Chala* in illustration is three-fold according as the illustration is lacking in the probandum or the probans or both,—the illustrations respectively being '*Tārakāḥ asmadādidvārā sadā gagane caratvāt pataṅgavat*', 'stars are...... * because they are always moving in the sky, like the *pataṅga*' (=sun, but taken to mean glow-worm); '*Ghaṭo dravyaṁ sāvayavatvāt ambaravat*', 'Jar is a substance because it is constituted of parts like *ambara*' (= garment, but taken to mean sky which is devoid of parts and hence devoid of the probans); '*Ayaṁ paśur viṣāṇitvāt govat*', 'This is an animal because it has horns, like *go*' (cattle, but taken to mean speech which neither is an animal nor has horns). The case of lack of both probans and probandum is also a case of lack of either probans or probandum, yet it is mentioned as a separate variety to show that opposition based on this would be very weak and ineffective.

Sāmānya-chala is two-fold according as it pertains to word or sentence and each of these is again six-fold according as possibility is looked upon as a rule, rule as possibility, subject as predicate, predicate as subject, epithet (*viśeṣaṇa*) as the thing (*viśeṣya*), or one epithet as another. We may now illustrate these: "If one says, 'He is quite likely to possess learning, because he is a brāhmaṇa and another opposes him by saying brāhmaṇahood is not nesessarily concomitant with possession of learning as we do not find 'possession of learning' in the case of a *vrātya* who is brāhmaṇa', it is a case of *sāmānya-chala*,

* The meaning is not clear. There seems to be some misprint here.

in which where one person intends to talk of possibility the other imposes the sense of necessity. If one says, 'Whatever, is smoky, is (also) fiery', and another opposes him by saying, "Fire may possibly be present in what has smoke, but on the strength of this only one cannot prove fire from the presence of smoke", it is a case of *sāmānya-chala*, in which when the speaker intends to speak of necessary connection, the opponent imposes the idea of possibility. If one says, "Word is non-eternal" (where non-eternality is predicated of word), and another objects, "All non-eternal things are not word", he makes the subject the predicate. If one says "What is non-eternal is an effect, because of non-eternality", and another urges "What is an effect is non-eternal, so the probans is not distinct from the probandum", it is an instance of *sāmānya-chala*, where the predicate is made the subject. If one says, "*Dvija-śata* (a century of the twice-born) has been fed", and another opposes by saying, "Century is insentient, so it cannot possibly be fed", here what is intended to be an epithet is looked upon as the substantive and the meaning taken exception to. If one says. '*Śatam dvijātayaḥ bhojiiāḥ*', 'A hundred twice-born were fed' and another objects to this by imposing on the expression the meaning 'Twice-born were fed a hundred times', it is a case in which one epithet is looked upon as another. There can be a seventh type when the substantive is looked upon as another epithet; e.g. when the opponent urges : 'Sanaka and the like are those that have been fed and not the twice-born' (*Sanakādayo bhojitā na dvijātayaḥ*), but this is included in the type in which the epithet is looked upon as a substantive.

Śaṅkara Miśra says that the figurative or secondary meaning which has become very common is as good as the primary meaning, and so has a rightful place in debates, thus opposition based on *upacāra-chala* is not proper (*kathāyāṁ lakṣaṇāyāḥ katham prayoga iti cet. na laukika-lakṣaṇāyā mukhya-tulyatvāt.* VV. p. 21). *Upacāra-chala* is nine-fold according as it pertains to *pratijñā*, *hetu* and *dṛṣṭānta* and in each of these to the substantive or the epithet or both.

As Śaṅkara Miśra has shown, opposition on the basis of *chala* can be easily met and shown to be wrong. Thus it could be subject to the 'check' *niranuyojyānuyoga* (finding fault with what is faultless).[14] Jayatīrtha (13th cent.) of the school of Madhva also regards *chala* as included in *niranuyojyānuyoga*, and as he has reduced (—as we shall see later—) the *nigrahasthānas* to six only, he regards *chala* as a case of *asaṅgati* (inconsistency).[15] Jayatīrtha has rightly stressed that many *jātis* are only examples of *chala* where a different meaning than that intended by the *vādin* (debater) is imposed on him (see PP. p. 73).

The examples of *chala* as they stand are so trivial that it is difficult to imagine that arguments and counter arguments could have been based upon them. It is however likely that in the course of serious discussions, words (like *sat*, *jñāna*) even if they do not change their meaning at least change their implications as it happens in the case of writings of even eminent philosophers. This would result in different kinds of incongruities and bewilderment. As it would be difficult to illustrate such involved and complicated processes, the early logicians chose examples which could easily illustrate the point. The logical significance of treating *chala* lies in the warning regarding such change of meaning and implications in a debate or discussion. The shades of words are very often seen to change in the course of the same debate or dialectical exposition.

Jāti—Sophistical refutation or futile rejoinder (*jāti*) is that objection which is put forth on the basis of mere similarity and dissimilarity (lit. possession of the same or contrary attributes) (*Sādharmya-vaidharmyābhyāṁ pratyavasthānaṁ jātiḥ*.—NS. 1.2.18). *Jāti* in the Indian *darśanas* refers to the generality in things. It can be determined by similarity and dissimilarity or possession of the same or contrary properties (*sādharmya-vaidharmya*). In *jāti*, an argument is opposed primarily on the basis of *sādharmya*, and *vaidharmya*, as is clear from its definition, and the term is extended to

other cases of sophistical refutation also. We may guess that the term *jāti* came into vogue for this reason. The derivation given by Vātsyāyana, viz. '*prayukte hi hetau yaḥ prasaṅgo jāyate sa jātiḥ.* (NB. 1.2.18)—'When a certain reasoning has been put forward, the objection to it that takes birth (*jāyate*) is called *jāti*'—does not seem to be connected with the original meaning of the word *jāti*', viz. generality.

Vātsyāyana says that the objection is in the form of opposition, condemnation, denial, on the basis of *sādharmya* and *vaidharmya*. That is to say, when the probans (*hetu*) put forward by the first party is one that is intended to prove the conclusion through its *sādharmya* with the example and an objection is raised on the basis of its *vaidharmya* from that example, or when the probans put forward is intended to prove the conclusion through its *vaidharmya* from the example and an objection is raised on the basis of its *sādharmya* with it, we have what is called *jāti*, because it is born as an opponent to the original reasoning.[16] In view of the real nature of several types of *jātis* which are not urged on the basis of *sādharmya* with or *vaidharmya* from any *dṛṣṭānta*, (example) at all, the *Vārttika* clarifies that when the *Bhāṣya* speaks of *sādharmya* with and *vaidharmya* from the *dṛṣṭānta*, it is only by way of an illustration; there are several *jātis* that are urged on the basis of *sādharmya* with and *vaidharmya* from other things also. Hence the *sūtra* NS. 1.2.18 should be taken as it stands so that the definition provided by it could be applicable to all cases of *jāti*.[17]

However, it should be noted that in several other cases taken as *jāti*, *sādharmya* and *vaidharmya* do not enter at all. So Uddyotakara has to define *jāti* as reasoning set up in refutation of the proof advanced in support of a proposition, which is, as a matter of fact, incapable of refuting the latter (*tatra jātir nāma sthāpanāhetau prayukte yaḥ pratirodhāsamartho hetuḥ.*—NV. 5.1.1.). Viśvanātha in his *Nyāyasūtra-vṛtti* clarifying the whole issue says that what is meant

by *jāti* being urged on the basis of *sādharmya* and *vaidharmya* only is that it overlooks or forgets the principle of *vyāpti* or invariable concomitance between the probans and the probandum. As said above, *sādharmya* and *vaidharmya* do not figure in all cases of *jāti*; so it can be said that *jāti* is a rejoinder without any relevance to *vyāpti* between the probans and the probandum. It can be said to be an inefficacious (*dūṣaṇāsamartha*) rejoinder other than *chala*, etc., or a rejoinder which is self-stultifying or self-demolishing (*svavyāghātaka*). Later logicians define *jāti* as '*asad-uttaram*' (wrong answer), that is to say, an answer which is either incapable of refuting the opposite view, or which is vitiated by self-contradiction.[18]

Twenty-four types of *jātis* are defined and illustrated in the *Nyāya-sūtra*, V. 1 : (1) *Sādharmya-sama* (Parity per similarity), (2) *Vaidharmya-sama* (Parity per dissimilarity), (3) *Utkarṣa-sama*, (Parity per augmentation), (4) *Apakarṣa-sama* (Parity per subtraction), (5) *Varṇya-sama* (Parity per *uncertainty*), (6) *Avarṇya-sama* (Parity per certainty), (7) *Vikalpa-sama* (Parity per shuffling). (8) *Sādhya-sama* (Parity per probandum), (9) *Prāpti-sama* (Parity per convergence), (10) *Aprāpti-sama* (Parity per non-convergence), (11) *Prasaṅga-sama* (Parity per continued question), (12) *Pratidṛṣṭānta-sama* (Parity per counter-instance), (13) *Anutpatti-sama* (Parity per non-generation), (14) *Saṁśaya-sama* (Parity per doubt), (15) *Prakaraṇa-sama* (Parity per vacillation), (16) *Ahetusama* (Parity per non-probativeness), (17) *Arthāpatti-sama* (Parity per implication), (18) *Aviśeṣa-sama* (Parity per non-difference), (19) *Upapatti-sama* (Parity per evidence), (20) *Upalabdhi-sama* (Parity per apprehension), (21) *Anupalabdhi-sama* (Parity per non-apprehension, (22) *Anitya-sama* (Parity per non-eternality), (23) *Nitya-sama* (Parity per eternality), (24) *Kārya-sama* (Parity per effect).

The '*sama*' at the end of each name signifies likeness which consists in the fact that there is no special reason why the original reasoning or demonstration (*sthāpanā-hetu*)

should be regarded as stronger by way of proof than the reasoning urged in confutation or the *jāti*.[19] Uddyotakara says '*sama*' (or likeness) consists in the propounding of an argument for the purpose of counter-poising the original argument, and what is meant by the names of the different types of *jātis* is counter-poising done on the basis of *sādharmya*, *vaidharmya* and so on; the counter-poising may or may not be actually accomplished, but the man who puts forward the *jāti* does so with the intention of counter-poising whether he succeeds or not. Or '*sama*' may indicate the absence of any specific quality which would lead one to prefer the original argument as against the counter-argument put forward in the *jāti*, the sense of the *jāti* being, "You do not indicate any particular reason or factor in support of your view as against mine". The idea of the person who puts forth the *jāti* (*jātivādin*) is, "My reasoning is exactly like yours". But by '*sama*' it is not meant that there is equality between the propounder of the original argument and that of the *jāti*, because the *jāti* being always a wrong answer, the *jātivādin* must be one whose view is wrong; whereas the original argument of the *vādin* (proponent) may be right or wrong.[20]

Udayanācārya in his *Bodha-siddhi* (also called *Nyāya-pariśiṣṭa*) mentions the explanations of the term '*sama*' that were known to him—(*i*) That of the *Vārttika*, that *jāti* is put forward for the purpose of counter-poising, or neutralising the force of the original reasoning; (*ii*) that of the *Nyāya-bhāṣya*; (*iii*) others explain it thus : The '*jātivādin*' is '*sama*' i.e. not superior to i.e. inferior to * the *vādin* who put forward the original argument, and this epithet of the *jātivādin* is transferred to his argument; (*iv*) the *samatva* of the *jāti* lies in the fact that while demolishing the reasoning of the *vādin*, it demolishes itself also. Udayana himself accepts this last explanation.[21]

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* *Sama=sādhāraṇa*=very ordinary, very poor—"*sama-padaṁ loke'pakṛṣṭa-vācy api dṛṣṭaṁ, yathā sādhāraṇam adya dinam iti; sādhāraṇa-padaṁ ca sama-paryāyatayā sthitam iti tasyāpakarṣe prayoga ity arthaḥ*."—Vardhamāna's *Prakāśa* on Udayana's *Bodhasiddhi* (pp. 5-6).

We may now briefly expound and illustrate the different kinds of *jātis*. The *Nyāya-sūtra* 5.1.2 defines the first two types thus—the original argument having been propounded on the basis of *sādharmya* and *vaidharmya* (possession of the same or contrary properties), if the opponent seeks to prove the contrary of its conclusion also on the basis of *sādharmya* and *vaidharmya*, we have instances of *Sādharmya-sama* (Parity per similarity) and *Vaidharmya-sama* (Parity per dissimilarity) (*Sādharmya-vaidharmyābhyām upasaṁhāre taddharma-viparyayopapatteḥ sādharmya-vaidharmyasamau.*—NS. 5.1.2).

(a) When the original argument is advanced on the basis of *sādharmya*, if the opposition to it seeking to establish the contrary of its conclusion, is also set up on the basis of *sādharmya*, and this opposition is claimed to be an equal of the original argument, it is a case of *sādharmya-sama*. For instance, the original argument is—

Anityaḥ śabdaḥ utpattidharmakatvād, yad utpatti-dharmakaṁ tad anityaṁ dṛṣṭaṁ yathā ghaṭaḥ, tathā cāyaṁ, tasmāt tathā.

(Word is non-eternal, because it has the character of being produced; things which have the character of being produced are seen to be non-eternal, e.g. the jar; word is such; i.e., it has the character of being produced; therefore, it is non-eternal). The rejoinder to this is—'*śabdaḥ nityaḥ amūrtatvāt ākāśavat*'. [Word is eternal, because like *ākāśa* (ether) it is incorporeal.]. The stand of the opponent is that there is no special reason why on the ground of its *sādharmya* with the *dṛṣṭānta* of non-eternal substances *śabda* should be regarded as non-eternal, and it should not be regarded as eternal on the ground of its *sādharmya* with the *dṛṣṭānta* of eternal substances.

Here the argument and the counter-argument are both on the basis of *sādharmya* (sameness of properties) That is the *sādharmya* part of the definition of *jāti*. Its *asaduttaratva*, its being a wrong rejoinder, can be seen from within the framework of the Nyāya philosophy as follows : All incorporeal substances are not eternal, (e g. *buddhi*, intellect) as would be

implied in the *jātivādin*'s argument. As a matter of fact, the *jāti* neglects or overlooks the principle of *vyāpti* (invariable concomitance), its proposition is argued on the basis of *sādharmya* alone without any reference to *vyāpti.*

The *Nyāya-sūtra* 5.1.3. has suggested how *jātis* are to be met. A proposition can be established in the same manner as the fact of a certain animal being a '*go*' (cow or bull) is established by the presence in it of the class-character '*gotva*', and not by the presence in it of such properties as white colour and the like which may or may not be present in cattle and which can be found in other entities also. (*Gotvād go-siddhivat tat-siddhiḥ.*—NS. 5.1.3.). If the *vādin* tries to establish his proposition by means of mere *sādharmya* and *vaidharmya*, then there would certainly be the uncertainty or inconclusiveness urged in the *jāti*. But there can be no such uncertainty when the conclusion is based upon a particular property (e.g. character of being produced) which is invariably concomitant with what is to be proved (e.g non-eternality). Thus the original argument is based on *vyāpti*, and so is sound, whereas the *jāti* is not. Therefore, it is not true to say that there is no special reason why the original argument should be regarded as more valid than the argument pitted against it.

We may note here that Vātsyāyana has given the following instance of *sādharmya-sama* wherein the argument and the counter-argument are both based on *sādharmya* :

Argument :

Kriyāvān ātmā dravyasya kriyāhetuguṇa-yogāt. dravyaṁ losṭaḥ kriyāhetuguṇayuktaḥ kriyāvān, tathā cā'tmā, tasmāt kriyāvān. (Soul must be active, because a substance, endowed with qualities conducive to activity, is active; the clod of earth which is a substance is endowed with qualities conducive to activity and is found to be active; the soul also is such; therefore, the soul must be active).

Counter-argument :

Niṣkriya ātmā vibhuno dravyasya niṣkriyatvāt; vibhu cākāśaṁ niṣkriyaṁ ca, tathā cātmā, tasmān niṣkriyaḥ.

(The soul must be inactive because every all-pervading substance is inactive; ākāśa, which is an all-pervading substance is inactive; the soul also is such; therefore, the soul must be inactive).

The *jāti-vādin*'s contention is that there is no special reason why on the ground of its *sādharmya* with active substances, the soul should be regarded as active and it should not be regarded as inactive on the ground of its *sādharmya* with inactive substances.

The later commentators and logicians dropped this illustration, because as a matter of fact the content of this *jāti* is true (as all *vibhu* or all-pervading things are devoid of activity), whereas the original argument does not constitute a sound proof. It is only the verbal expression of the *jāti*, which bases the reasoning on *sādharmya* alone without reference to *vyāpti*, that is defective.[22] Therefore Udayana says: Each of these two *jātis*, viz. *sādharmya-sama* and *vaidharmya-sama* is three-fold—(*i*) Bearing upon a true subject (*sad-viṣaya*), i. e. refuting an argument whose content is right, as for example, the illustration given by the *Vārttika*, word being really non-eternal (according to the Naiyāyika). (*ii*) Bearing upon an untrue subject, i.e. refuting an argument whose content is not true—The argument being advanced in the form, 'Word' (*śabda*) must be eternal, because it is intangible (*sparśa-śūnya*), like *ākāśa*', the counter-argument is set up against it—'Word being cognisable (*prameya*) and as such similar to non-eternal things, should be regarded as non-eternal'. (*iii*) Wrongly expressed (*asaduktika*)—the examples cited in the *Bhāṣya* belong to this type, as their content is true, the verbal expression of it alone being wrong. A rejoinder though quite right in content, if it is set forth in a wrong form, becomes a *jāti* (wrong or futile rejoinder).[23]

We may now return to our exposition.

(*b*) The original argument is: *Śabdaḥ anityaḥ utpatti-dharmakatvāt; yan na anityaṁ na tat utpatti-dharmakaṁ, yathā ākāśam* (Word is non-eternal, because it has the

character of being produced; what is not non-eternal has not the character of being produced, e g. *ākāśa*.

The counter-argument to this is: *Śabdaḥ nityaḥ amūrtatvāt, ākāśavat.* If word be regarded as non-eternal by reason of its *vaidharmya* from the eternal *ākāśa*, it should be regarded as eternal by reason of its *sādharmya* with the eternal *ākāśa* due to its incorporeality. Here the original proposition is based on *vaidharmya* and the opposition to it on *sādharmya*.

These two are illustrations of *sādharmya-sama*. The argument about there being no special reason which makes the original argument more acceptable than the counter-argument, holds good in all cases of *jāti*.

(c) Similarly, when the original argument is propounded on the basis of *vaidharmya*, and opposition is set up against it on the basis of *vaidharmya* contrary to the former, and

(d) when the proposition is propounded on the basis of *sādharmya* and opposition is set up against it on the basis of *vaidharmya* contrary to the former, we have *vaidharmya-sama* (Parity per dissimilarity).

These can be illustrated as follows:

(c) Original argument—Word (*śabda*) must be non-eternal by reason of its *vaidharmya* from *ākāśa*, in the form of the character of being produced.

Counter-argument—Word (*śabda*) should be regarded as eternal by reason of its *vaidharmya* from the jar, in the form of incorporeality (*amūrtatva*).

(d) Original argument—Word must be non-eternal by reason of *sādharmya* with jar, as both have the character of being produced.

Counter-argument—If by reason of its *sādharmya* with jar, word be regarded as non-eternal, then by reason of its *vaidharmya* from jar (in the shape of incorporeality) it should be regarded as eternal.

It can be seen that in all these cases of *sādharmya-sama* and *vaidharmya-sama*, the *jāti* tries to point out that there is no

special reason to prefer the conclusion of the original argument as against that of the counter-argument. The *jāti* thus bears the semblance of the urging of the fallacy of Inconclusiveness (*anaikāntika*). But whether its content be true or false, it is wrongly expressed, so it can never serve to refute the original argument.

Udayana and following him Śaṅkara Miśra hold that cases where proof based on one *pramāṇa* is opposed by proof based on another *pramāṇa* are also to be included in *sādharmya-sama* and *vaidharmya-sama* but in all cases of *jāti* the second proof is based on erroneous knowledge. For instance, the *vādin* says, 'This is white, because it is a conch, like other conches'. The *prativādin* opposes this by saying, "This is not white as it is apprehended as yellow by perception. If my proof based on perception is not taken as sublating the *vādin*'s proof based on inference, then inference also cannot be taken as proving its thesis. There is no reason why one *pramāṇa* should be discriminated against the other?" These two *jātis* are meant to impose the fallacy of counter-balanced reasoning (*samabalatvābhidhānāt sarvatra sat-pratipakṣatvam evāropyam.*—VV, p. 22); these *jātis* involve *vyāghāta* (contradiction) like all other *jātis*; and they are lacking in the basis of *vyāpti* (invariable concomitance) which is essential for all reasoning; they also employ the factors of *sādharmya* and *vaidharmya* which are not necessary in logical reasoning (see BS. pp. 12-13; VV. pp. 22-23). It may be noted here that Śaṅkara Miśra's exposition is only a systematic summary of Udayana's commentary in the *Bodhasiddhi* or *Nyāyapariśiṣṭa*. Udayana says that a *jāti* is defective or faulty in two respects, viz. (*a*) all *jātis* have this in common that they involve some sort of *vyāghāta* self-contradiction); and (*b*) individual *jātis* may be lacking in the essential factors of reasoning, or may have superfluous factors, or may not be pertaining to the subject under discussion. (*Duṣṭatvamūlaṁ tu cintyate, dvividhaṁ ca tat, sādhāraṇaṁ asādhāraṇaṁ ca. tatra prathamaṁ nānāprakaro*

vyāghāto vakṣyate. dvitīyaṁ, yuktāṅgahānitvam, ayuktāṅgādhika-tvam, aviṣayavṛttitvaṁ ca.—BS. pp. 13. See also PP. p. 60).

Jayatīrtha says that in exposing, e.g. *sādharmya-sama* or *vaidharmya-sama*, the deficiency in respect of *vyāpti* should first be pointed out and not that it is a *jāti*, because the *vādin* does not yet know that the *prativādin* does not recognise *vyāpti* here, which fact is still in the mind of the *prativādin*. When the latter expressly states that *vyāpti* is of no use since *sādharmya* and *vaidharmya* are the determining factors, then the *vādin* should say, " If this be so, your argument cannot prove anything as it is counterbalanced; a counter-view based on *sādharmya* or *vaidharmya* which has nothing to do with *vyāpti* is possible in respect of your reasoning also, and so it would be contradicted. Your own line of argument demolishes what you have to say, this being a case of *svanyāya-virodha* (condemnation by one's own logic or way of refutation applying to one's own view).

(3) *Utkarṣa-sama* (Parity per augmentation), (4) *Apakarṣa-sama* (Parity per subtraction), (5) *Varṇya-sama* (Parity per uncertainty), (6) *Avarṇya-sama* (Parity per certainty), (7) *Vikalpa-sama* (Parity per shuffling) are based upon the difference in the properties of the subject * and the example; (8) *Sādhya-sama* (Parity per probandum) is based upon the fact of both (subject and example) being objects to be proved (by inference) (*sādhya-dṛṣṭāntayor dharma-vikalpād ubhayasādhyatvāc cotkarṣā-pakarṣa-varṇy-avarṇy-avikalpa-sādhya-samāḥ.*—NS. 5.1.4).

'*Utkarṣa*', says Uddyotakara, consists in imposing a property that does not exist, and '*apakarṣa*' in the taking away of the property that is present; '*varṇya* is that which has to be proved; and '*avarṇya*' that which has not to be proved; *vikalpa* consists in a peculiarity. The opposition that urges these constitutes the *jātis* *utkarṣa-sama*, etc. And when the counter argument shows that the character to be proved and that which has been put forward to prove it, stand on the same footing, it is a case of *sādhya-sama* (Parity per probandum).[24]

* *Sādhya*, says Viśvanātha, stands here for *pakṣa* (subject).

(3) When the opponent puts forward the contingency of an additional property of the *dṛṣṭānta* (example) as subsisting in the *pakṣa* (subject) it is *Utkarṣa-sama*. For instance :

Argument—Word is non-eternal, because it has the character of being produced, like jar.'

Counter-argument—*Yadi yathā ghaṭas tathā śabdas tadā ghaṭo rūpādimān śabdo'py evaṁ prasaktaḥ.*

('If word is like the jar, then since jar has colour, word also should be regarded as having colour.') If it does not have colour as jar has, it cannot also be non-eternal like the jar. This *jāti* is intended to urge the fallacy of contradictory reason(*viruddha*) proving the opposite of what is to be proved.

(4) When the opponent urges the contingency of the absence of a certain property in the *pakṣa* on the analogy of the *dṛṣṭānta*; it is *Apakarṣa-sama*.

Argument—as in 3.

Counter-argument— *Yadi yathā ghaṭas tathā śabdas tadā ghaṭo aśrautraḥ śabdo'py evaṁ prasaktaḥ.*

('If word is like the jar, then since jar is inaudible, word also should be regarded as inaudible'). If it is not inaudible then it cannot also be a created thing (*kṛtaka*) like the jar.

This *jāti* is intended to urge the fallacy of *asiddha* (unreal reason). Udayana seems to have widened the scope of *apakarṣa-sama* by saying that it urges the absence of a certain property associated with the probans or the probandum in either the subject (*pakṣa*) or the example (*dṛṣṭānta*) on the ground of its absence in the other; e.g. Word being brought about is colourless, so jar also should be colourless (which it is not). As even though produced word has no colour, so jar though produced may not have non-eternality, and thus the *dṛṣṭānta* of the original argument is devoid of the probandum (*sādhya-vikala*). Similarly, the *jātivādin* may say that word though produced is found to be colourless, while the jar is not so; hence jar cannot have *kṛtakatva* (the character of being created),

and so the *dṛṣṭānta* is devoid of the probans (*sādhya-vikala*). Urging the contingency of the absence of the probans or the probandum in the *pakṣa* on the ground of the absence of properties connected with these, the *jātivādin* may say, "As there is not the presence of utensils, etc. which are found in the kitchen along with fire and smoke, so these two are not present on the mountain". When he urges the absence of the probandum in the *pakṣa*, he tries to impose the fallacy of contradiction or counter-balanced argument on the *vādin*'s reasoning; and when he urges the fallacy of absence of probans, he urges the fallacy of *asiddha* (unreal reason). Thus the *jātivādin* tries to impose any one of the above mentioned four fallacies.

After giving an exposition of Udayana's view of *apakarṣa-sama*, Jayatīrtha says that this is not correct. If the absence of the probandum in the *pakṣa* and the *dṛṣṭānta* be urged then this *jāti* would not be different from *sādharmya-sama* and *prakaraṇa-sama*. Therefore according to Jayatīrtha, *apakarṣa-sama* is the urging of the absence of the probans in the *pakṣa* without any relevance to *vyāpti* (—as the *Nyāya-sūtra* also defines it) (*vyāptyanapekṣayā pakṣe sādhanābhāvasādhanam evāpakarṣasamaḥ.*—PP., p. 62). This *jāti* can be answered by pointing out the absence of *vyāpti* in the *jātivādin*'s argument; as also contradiction with the *pramāṇa* cognising the probans (which is urged by him to be absent). If he does not accept these and regards co-existence or association alone as probative, his own argument, viz. '*Dhūmavattvam asādhakaṁ svarūpāsiddhatvāt śabdānityatva-sādhaka-cākṣuṣatvavad* (*dhumavattva*, 'possession of smoke' is non-probative as it is non-existent, like *cākṣuṣatva*, 'being perceived by the eye' proving the non-eternality of word)—will stand condemned by his own logic (—*svanyāyavirodha*) (See Janārdana's commentary on PP., p. 62).

Udayana has raised an interesting point in connection with *apakarṣa-sama*. How can one urge the absence of the probans which is actually seen ? This is true. Hence Śaṅkarā-cārya and others have illustrated this by urging the presence

of body or the absence of creatorship with reference to God. For instance, the original argument being "Earth, etc. must have a creator, because they are effects, like jar, etc.", the *jātivādin* says, "The effect is seen to be connected with a creator having a body; so earth also must have a creator with a body, otherwise he would not also be creator." That is to say, these arguments and counter-arguments are really employed in connection with subtle things. The *Bhāṣyā* and *Vārttika* have given the ordinary examples of word, mountain, etc. only to show the method of argument or refutation. We find that many of the illustrations of *chala*, *jāti*, etc., are very trivial and obvious and one at times finds hardly any thing in them. But they help us to detect flaws in serious long-drawn arguments where the debaters easily pass on from one shade of meaning of a word to another, or from one argument to another and so on.

(5-6) *Varṇya* means '*khyāpanīya*', that which is yet to be known, hence uncertain, and *avarṇya* (certain) is the reverse of it. These two properties 'uncertainty' and 'certainty' are attached respectively to the subject (*pakṣa*) and the example (*dṛṣṭānta*) because the presence of the probandum (*sādhya*) in the example is known for certain, whereas its presence in the subject is doubtful or uncertain. When the opponent reverses these qualities by attributing uncertainty to the example and certainty to the subject, we have the *jātis varṇya-sama* (Parity per uncertainty) and *avarṇya-sama* (Parity per certainty). *Varṇya-sama* by reducing the example to uncertainty makes it equal to the subject, and *avarṇya-sama* by removing uncertainty from the subject makes it equal to the example. For instance:

(5) Argument—as in (3).

Counter argument—The fact of word being non-eternal being uncertain, that of the jar being non-eternal should also be uncertain (*śabdo' varṇya iti ghaṭo'py evam*).

(6) Argument—as in (3).

Counter-argument—That the jar is non-eternal is certain so the non-eternality of word also should be certain (*ghaṭo' nitya iti avarṇyaḥ, śabdo'py evam*).

Viśvanātha has very clearly brought out the point in these counter-arguments. Against any argument that the *vādin* may advance in support of his thesis, the *prativādin* will set up the following opposition : What can prove the proposition is only that property which as probans subsists in the *pakṣa* (subject) of the proposition; this probans must, in order to be effective, subsist in the example also; now the principal property that subsists in the *pakṣa* is the character of having the presence of the probandum doubtful, and this same character should be present in the example which is its equal; hence the example also should be one in which the presence of the probandum is doubtful. Similarly the following is the contention of *avarṇya-sama* : The example must be one in which the presence of the probandum is known for certain; now the property in the example must also reside in the subject (*pakṣa*); hence the subject also must be one in which the presence of the probandum is known for certain, and if the subject be such, then it loses the very character of '*pakṣa*' in which the presence of the probandum must be necessarily doubtful.

Varṇya-sama urges that if the *pakṣa* and *dṛṣṭānta* are equals then as smoke has not accomplished its objective with respect to the mountain, so it must be such in the kitchen also; that is to say, the kitchen has yet to be proved to be possessing the probandum fire, and thus the *dṛṣṭānta* is *sādhya-vikala*; if not, then it would have to be proved as possessing the probans, and the *dṛṣṭānta* would be *sādhana-vikala*. Thus *varṇyasama* imposes the fallacy of *sādhana-vikala* or *sādhya-vikala dṛṣṭānta*. It can be met by saying that by the mere presence of the probans, an entity can very well serve as an illustration and so it is not at all necessary to enter into an investigation of particular properties and if this were thought necessary then there would be the contingency of *svanyāya-*

virodha To wit : "This example cannot be a constituent of proof as it is devoid of the probandum like the recognised example" —to this argument of the *jātivādin*, the *vādin* can say, "With regard to your *dṛṣṭānta* also it can be said that it is devoid of the probandum"; hence there is *svanyāyavirodha*. (See PP, p. 63 and Janārdana's commentary on it). Jayatīrtha explains *svanyāyavirodha*, or being condemned by one's logic as a flaw to be urged with reference to all *jātis*. *

Avarṇya-sama is intended to impose the fallacy of *asiddha*, whether it be of the type of *svarupāsiddhi*, *āśrayāsiddhi* or *vyāpyatvāsiddhi*. If the *pakṣa* be possessed of a probans which has accomplished its objective, then there would not be any doubt about it and it would not be a *pakṣa* (—*āśrayāsiddhi*), and if it were not established as having the probandum then such a probans could not exist in it (—*svarūpāsiddhi*), or the invariable concomitance of the probans with the probandum could not be established, that is to say the probans could not be said to be the determinate concomitant of the probandum (—*vyāpyatvāsiddhi*).[25]

(7) The example being endowed with the property that constitutes the probans (proving the desired proposition), if the opponent attributing to it some other property urges on its basis a different property in the probandum, it is a case of *Vikalpa-sama* (Parity per shuffling).[26] For instance :

Argument—As in (3).

Counter-argument—" Sound may be capable of being produced (like the jar), but sound is produced by disjunction (*vibhāga*) while the jar is not produced by disjunction; hence the diversity between the two in the form of one being eternal and the other non-eternal, should be as possible as that in the form of one being produced by disjunction, while the other is not produced by disjunction" (-*saty etasmin utpattidharmakatve vibhāgajaḥ śabdo na vibhāgajo ghaṭaḥ vibhagajā' vibhāgaja-vikalpavac ca nityānitya-vikalpa iti vikalpa-samaḥ*.—NV. p. 533).

* This will not be repeated henceforth.

Vikalpa-sama is meant to urge the fallacy of *anaikāntika-tva* (inconclusiveness).

(8) That character is called 'probandum' upon which the whole force of the reason (*hetu*) and the other factors of reasoning is operative, and when such a character is attributed to the example it is a case of *sādhya-sama* (Parity per probandum).[27] For instance :

Argument—as in (3).

Counter-argument—If word is like jar, then jar is like word, and as word is to be proved non-eternal, so jar would also necessarily have to be proved to be non-eternal, otherwise it would not be like it. (*Yadi yathā ghaṭas tathā śabdaḥ prāptaṁ tarhi yathā śabdas tathā ghaṭa iti śabdaś cānityatayā sādhya iti ghaṭo'pi sādhya eva syād anyathā hi na tena tulyo bhaved*-NM, II, p. 177).

Sādhyasama is meant to urge the fallacy of *asiddhi* in respect of *āśraya*, *svarūpa* and *vyāpti*.

The answer to the above six *jātis* is that inasmuch as the proof is secured on the basis of a particular *sādharmya* (between the subject and the example), there can be no denial of it on the basis of just any *vaidharmya* (*kiñcit-sādharmyād upasaṁhārasiddher vaidharmyād apratiṣedhaḥ.* —NS. 5.1.5). What is meant is that *vyāpti* or invariable concomitance between the probans and the probandum is the essential element in any sound reasoning, and when we have even one point of *sādharmya* (between subject and example) which is invariably concomitant with the probandum, that suffices to prove our conclusion. It is not possible for the subject and the example to have no *vaidharmya* at all, as that would mean their identity in all respects. What is necessary is that they should have *sādharmya* in respect of a certain property that is invariably concomitant with the probandum. This answer meets the objection put forth by all the six *jātis* described above. Moreover, as the 'example' becomes an 'example' due to the indication of the actual

presence in it of the probandum, it cannot be said to stand on the same footing as the subject in which the presence of the probandum is still to be proved. (*sādhyātideśāc ca dṛṣṭāntopapatteḥ.*—NS. 5.1.6). The example is one about which all men, ordinary as well as learned, are in agreement, so it could never be like the subject in which the subsistence of the probandum has yet to be established, whereas in the *dṛṣṭānta* the probandum is known to be present. This is an answer to *varṇya-sama, avarṇya-sama* and *sādhya-sama.*

(9-10) The cause (*kārarka* or *jñāpaka*, i.e. originating or cognising) could establish (bring about or make known) what is to be established either by uniting or by not uniting with it. If it unites with it then it becomes non-different from it; whereas if it does not unite with it, it cannot establish it. These arguments constitute *Prāpti-sama* (Parity per convergence) and *Aprāpti-sama* (Parity per non-convergence). (*Prāpya sādhyam aprāpya vā hetoḥ prāptyā'viśiṣṭatvād aprāptyā'-sādhakatvāc ca prāptyaprāpti-samau.*—NS. 5.1.7.). Vācaspati explains these by saying that what is non-existent can be established and not what is existent; what is united with anything must be an accomplished or known entity; hence no such thing can be the *sādhya* (what is to be established); and when two things unite they become non-different, hence if the probans and the probandum become united there cannot be the relation of probans and probandum between them as this relation is based on difference of things.[28]

As Uddyotakara says, even though both these *jātis* represent a single opposition to the same argument yet they are mentioned separately in view of the two different ways in which one may look upon these. If one intends to speak of the two as different then there are two different *jātis, prāpti-sama* and *aprāpti-sama*; but when they are intended to be spoken of as one there is only one rejoinder; just as in the case of the forest and the trees, if we wish to lay stress upon the diversity of trees we regard them as many trees, but if we wish to lay stress upon them as constituting a single entity we speak of them as the forest.

These two *jātis* are met by saying that the denial in them is not effective because we find the jar and such objects accomplished when their causes are in contact with them (i.e. the clay and the like out of which they are made) (so *prāptisama* can have no force), and because killing by magic is accomplished without the killer coming into contact with the killed person (so *aprāptisama* can have no force) (*Ghaṭādiniṣpatti-darśanāt pīḍane cābhicārād apratiṣedhaḥ.* —NS. 5 1.8).

Uddyotakara rightly points out that this *jāti* is an attempt to repudiate all kinds of *hetus* (causes) whether cognitive (*jñāpaka*) or originating (*kāraka*). But the *jāti* stands self-condemned by the very fact that it is based upon the total rejection of the relation of cause and effect. If what is urged in the *jāti* is true, then the *jāti* itself would be an impossibility because it can be asked whether the *jāti* accomplishes its purpose by denying the causal relation by getting at it or without getting at it. And does it come into contact with what it denies or does it not come into contact with it ? Thus the objections urged by this *jāti* will apply to it with equal force.[29]

This cannot be said to be a *jāti*-like rejoinder aiming at repudiating the *vādin*'s argument by pitting against it a similar argument and thus imposing a logical fallacy on the original argument. It sounds more like a sceptic's contention upsetting the relation of causality between the originating cause and the effect, or that between the cognitive cause or the proof and that which is to be proved.

(11-12) When the basis of the *dṛṣṭānta* is not mentioned it is a case of *Prasaṅga-sama* (Parity per continued question); and when the opposition is set up through a counter-instance (*prati-dṛṣṭānta*), it is *Pratidṛṣṭānta-sama* (Parity per counter-instance) (*Dṛṣṭāntasya kāraṇānapadeśāt pratyavasthānāc ca pratidṛṣṭāntena prasaṅga-pratidṛṣṭānta-samau.*—NS. 5.1.9).

(11) When the opponent wants to know the proof for the proof also, it is opposition called *Prasaṅga-sama*; for instance, the *jātivādin* in the case of the above-mentioned argument would want to know what is the proof that the jar itself is non-eternal (*ghaṭa eva tāvad anitya ity atra ko hetur iti prasaṅga-samaḥ.*—NB. 5.1.9). Such continued queries about the example would lead to *anavasthā* (infinite series)

Vācaspati explains the difference between *sādhya-sama* and *prasaṅga-sama* by saying that in the former, the *jāti-vādin* urges the necessity of providing the probans and all other factors of reasoning in support of the *dṛṣṭānta* exactly in the same manner as in support of the *sādhya*, whereas in *prasaṅga-sama* he only wants to know by what *pramāṇa* (means of knowledge) the example is known.[30]

The answer to *prasaṅga-sama* is that it could come to an end just as it does in the case of the fetching of the lamp. (*Pradīpopādāna-prasaṅga-vinivṛttivat tad-vinivṛttiḥ.*—NS. 5.1.10) People desiring to see the lamp do not need to fetch another lamp, because they can see it even without the second lamp. Similarly, the example is adduced to make known some thing that is not already known, but the example itself is known as it is that with regard to which there is consensus of opinion among all men whether learned or not, and so any mention of proof for the example would be superfluous.

According to Udayana and the later logicians, *prasaṅga-sama* consists in the urging of the fault of *anavasthā* (—as a matter of fact it is *anavasthābhāsa*—) in respect of knowing or originating (*anavasthābhāsaprasaṅgaḥ prasaṅgasamaḥ*—BS. p. 29; e.g. What is the *pramāṇa* for a *pramāṇa*? What is the *dṛṣṭānta* for a *dṛṣṭānta*? and so on). If a thing is known as having *jñātatva* as its attribute this *jñātatva* also requires to be known and so on ad infinitum. Or what is the cause of the cause...? This *jāti* is self-stultifying as the same contingency can be urged against the *jātivādin's* argument, viz. "Your probans is not probative because it suffers from the

fault of *anavasthā* (infintite series)." The *jātivādin* can as well be asked what is the proof for his probans and again the proof for this proof and so on. (See BS., pp. 29–30; PP., pp. 66–67).

(12) When the opposition is based upon a *pratidṛṣṭānta* (counter-instance) it is an instance of *Pratidṛṣṭānta-sama.* For example :

Argument—as in (3).

Counter-argument—*Yathā ghaṭaḥ prayatnānantarīyakaḥ san anityo dṛṣṭaḥ evam ākāśam prayatnānantarīyakaṁ nityaṁ dṛśyate tadvac chabdo'pi nityaḥ syāt.*—NM. II, p. 179).

[As a jar being brought about by effort is found to be non-eternal, so *ākāśa* (space) being brought about by effort is seen to be eternal, similarly word also may be eternal] * The *jātivādin* tries to obstruct or refute the original argument by putting forward a counter-instance without adducing a reason (*hetu*), and hence its distinctness from *sādharmya-sama* etc. (*tasmād hetunirapekṣeṇa pratidṛṣṭāntamātreṇa bādhapratirodhayor anyatarodbhāvanam pratidṛṣṭāntasama ity Udayanaḥ* –PP., p. 67).

The answer to *pratidṛṣṭānta-sama* is that if the counter-instance (*pratidṛṣṭānta*) is a proof, the example (*dṛṣṭānta*) also is not a non-proof (*pratidṛṣṭānta-hetutve ca nāhetur dṛṣṭāntaḥ.* —NS. 5.1.11). When the *jātivādin* puts forward the *pratidṛṣṭānta* he does not put forth any special reason in support of it as against the *dṛṣṭānta,* so that it may be said that the former is effective proof, whereas the latter is not. This answer, it may be noted, again seems to counter-poise the *jāti* and does not argue out a case for the soundness of the original *dṛṣṭānta* as against the *prati-dṛṣṭānta.* But we should not forget that the original argument is firmly based on

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* Some one who holds that *ākāśa* is created by digging a well and the like activities may regard *ākāśa* as brought about by effort (*kaḥ punar ākāśasya prayatnānantarīyakatvaṁ vadet, kūpakhananādinā'kāśakaraṇaṁ manvāna evaṁ brūyād api kaścit.*—NM. II, p. 179.

vyāpti and the *dṛṣṭānta* is an instance of the invariable concomitance of the probans and the probandum, whereas the *pratidṛṣṭānta* is not such an instance of *vyāpti*.

The *jātivādin* tries to impose the fallacy of counter-balanced argument (when he intends the *pratidṛṣṭānta* to be an equal of the *dṛṣṭānta*), or of *bādha* (when he intends it to be more forceful). The 'check' *Nyūna* can be applied to the *jātivādin*'s argument as it is deficient in respect of the '*hetu*'; or if he does not regard the *hetu* as an essential element in a reasoning, the *vādin* can similarly put forth only an illustration in arguing with him and refute him (*svanyāyavirodha*) (See PP., p. 67).

(13) Before the birth of the *pakṣa* (subject) since what is urged as the ground for the predication of the probandum cannot subsist, the argument can prove nothing. This is the *jāti* called *Anutpatti-sama* (Parity per non-generation) (*Prāgutpatteḥ kāraṇābhāvād anutpatti-samaḥ.*—NS. 5.1.12). For instance, the argument being '*Anityaḥ śabdaḥ prayatnānantarīyakatvād ghaṭavad*' (Word must be non-eternal, because it comes after effort, like a jar), the opposition to it is: "Before it is produced, the word has not come into existence, hence at that time 'the character of coming after effort' which is the ground urged for its non-eternality does not subsist in it; and since this character does not subsist in word, it follows that word is eternal, and that which is eternal is not produced." This rejoinder based on non-generation is called *anutpatti-sama*. This *jāti* imposes the fallacy of *āśrayāsiddhi* or *svarūpāsiddhi* or *bhāgāsiddhi* and can be set forth in respect of not only the *pakṣa* but also the probans, probandum, illustration and their apprehension according to Udayana and the later logicians.

This *jāti* can be met as follows: Since it is only when it has been produced that the thing is what it is, and since what is urged as the ground for the proposition does then subsist in it, the presence of the ground cannot be denied

(*Tathābhāvād utpannasya kāraṇopapatter na kāraṇa-pratiṣedhaḥ.* —NS. 5.1.13). It is only when it has been produced that 'word' becomes 'word'; before it is produced it is not even word. And when the word has been produced, the character of coming after effort which is the ground for non-eternality does subsist in it and the objection thus loses all its force.[31]

The *Vārttika* suggests another answer also to this *jāti*. The ground put forward in support of the proposition is an indicating or cognitive cause (*jñāpaka kāraṇa*), not an originating cause (*kāraka*), and to urge against the *jñāpaka hetu* objections that are applicable to the *kāraka hetu* is irrelevant (*jñāpakaś cāyaṁ hetur na kārakaḥ jñāpake ca kārakavat pratyavasthānam asambaddham*). What is meant is that it is only the *kāraka hetu* which on ceasing to exist, puts on end to the existence of the effect. But this is not true of the *jñāpaka hetu*, the presence or absence of which does not affect what it indicates. Thus though the character of being produced after effort may not be present when the word is not produced, that does not affect the indicating or proving efficiency of that character.

Some object, says Uddyotakara, to this *jāti* by saying that when it is said that before the word is produced, the ground is not there (*Sū.* 12), this becomes a case of *Arthāpatti-sama* (Parity per presumption). For instance, since before word is produced, the character of coming after effort cannot belong to it, it follows by implication that not having the character of coming after effort, it must be eternal. The answer to such a *jāti* would be as follows : It is not necessary that what does not possess the character of coming after effort must be eternal. As a matter of fact, a thing not possessing the character of coming after effort can be of three kinds—*(a)* eternal, e.g. *ākāśa* and the like, *(b)* non-eternal, e.g. flash of lightning, *(c)* absolute non-entity, e.g. sky-flower.

Uddyotakara takes exception to this. It is not correct to say that things not possessing the character of coming after

effort can be absolute non-entities or eternal, because when one speaks of the character of coming or not coming after effort one is talking of things that have birth or are produced.

Still another objection to *anutpatti-sama* is that it cannot be regarded as *jāti* as in it the opposition is not on the basis of *sādharmya* or *vaidharmya* as the definition of *jāti* requires. The answer to this is that this is not correct, as there is some sort of similarity even here. Just as the unproduced yarn cannot be the cause of cloth, so the character of coming after effort, which is not produced before the production of word, cannot be the cause of the proving of non-eternality in word. This further shows that whereas in *anutpatti-sama* the similarity urged is to such causes as are not produced, in *arthāpatti-sama*, the opposition is based upon the imposing of a meaning contrary to the meaning of a sentence.[32]

(14) Generality (*sāmānya*) and the example both being equally perceptible by the senses, the opposition based on *sādharmya* with eternal as well as non-eternal things constitutes *Saṁśaya-sama* (Parity per doubt) (*sāmānya-dṛṣṭāntayor aindriyakatve samāne nityānitya-sādharmyāt saṁśaya-samaḥ.* —NS. 5.1.14). For instance :

Argument—as in (13).

Counter-argument—Though word comes after effort it has this *sādharmya* with the eternal *sāmānya* that both are perceptible by the senses; the same is its *sādharmya* with the non-eternal jar; thus due to its *sādharmya* with both eternal and non-eternal things, there should be doubt as to the real character of word.

The *Nyāya-sūtra* gives an idea of *saṁśayu-sama* by means of just an illustration. Udayana gives a general definition when he says that *saṁśaya-sama* consists in raising an objection on the strength of a common factor likely to lead to doubt even when a determining factor is presented (*nirṇayakāraṇopakṣepe sati saṁśaya-kāraṇena pratyavasthānaṁ saṁśaya-samaḥ.*—BS., p. 38).

Uddyotakara answers those who hold that *saṁśaya-sama* is not different from *sādhya-sama* by saying that in the former there is *sādharmya* of the *pakṣa* (e.g. word) with two things (which are eternal and non-eternal), whereas the latter is based on *sādharmya* with a single thing.

Saṁśaya-sama can be met as follows: As regards the doubt being raised on the basis of mere *sādharmya*, it can be rejoined that there can be no such doubt when the *vaidharmya* from that same thing has been recognised (as in the doubt whether a particular thing is a man or a pillar). And if doubt were to arise even when both *sādharmya* and *vaidharmya* are recognised, there would be no end to such doubts. Moreover *sādharmya* cannot be accepted as always giving rise to doubt because even when there is *sādharmya* between two things, doubt is set aside when the distinguishing feature of one of them is recognised. (*Sādharmyāt saṁśaye na saṁśayo vaidharmyād ubhayathā vā saṁśaye'tyanta-saṁśaya-prasaṅgo nityatvānabhyupagamāc ca sāmānyasyā'pratiṣedhaḥ*.-NS. 5.1.15).

(15) Vacillation (*prakriyā*) arises due to *sādharmya* with both (things possessing the probandum and those possessing the contrary attribute); opposition based upon this is called *Prakaraṇa-sama* (Parity per neutralisation) (*ubhaya-sādharmyāt prakriyā-siddheḥ prakaraṇa-samaḥ*.—NS. 5.1.16). On account of the *sādharmya* of 'word' with both eternal and non-eternal things there is the likelihood of both the contrary views that are embodied in the argument and the counter-argument.

What has been said in the *sūtra* applies to the case of *vaidharmya* also, as the *Bhāṣya* points out; and due to *vaidharmya* from both, vacillation (*prakriyā*) arises and opposition put forward on the basis of this also constitutes *prakaraṇa-sama*.

Udayana says that '*sādharmyāt*' in the definition is meant to suggest that it is a case of *prakaraṇa-sama* when there is vacillation owing to the possibility of a counter-argument based on *sādharmya* and the like, or a proof (source of

knowledge) considered to be equally effectual, and proving the opposite (*sādharmyād ity asya pratipakṣa–sādhakopalakṣaṇam arthaḥ.*—BS., p. 40).

Some say that *prakaraṇa-sama* is not different from *saṁśaya-sama* and *sādharmya-sama.* But this is not true as *prakaraṇa-sama* is not necessarily based on *sādharmya* as the latter are; *prakaraṇa-sama* merely urges vacillation owing to there being an equally strong proof proving the opposite of what is intended to be proved by the *vādin* (e.g. The *vādin* argues : 'Word is non-eternal, because it is brought about'; to this the *prativādin*'s rejoinder is : 'Word is eternal, because it is audible.' If the latter probans is not recognised as sound, there is no reason why the former should be regarded as such. This would only lead to vacillation. (See BS., p. 41 and Vardhamāna's commentary). Jayatīrtha is not inclined to accept *prakaraṇa-sama* as a distinct type of *jāti* as if it is based on sound proof it would be a sound answer or refutation; otherwise it can be included in *sādharmya-sama* etc. (see PP., p. 68).

Prakaraṇa-sama can be met by saying that as the said vacillation can follow only from the counter-view, that is to say, only by regarding the counter-view as an established fact, there can be no denial of the counter-view. (It may be noted that 'counter-view' stands for the view of the first party; it is called the counter-view from the opponent's point of view). When the opponent puts forward this *jāti* based upon vacillation with regard to the exact character of word on account of its *sādharmya* with eternal and non-eternal things, he admits that the proposition 'Word is non-eternal', is as admissible as the proposition 'Word is eternal'; if he were to regard one as more reasonable that would be accepted and there would be no vacillation. And when he accepts the admissibility of the view 'Word is eternal,' he cannot consistently with himself deny it (*pratipakṣāt prakaraṇasiddheḥ pratiṣedhānupapattiḥ pratipakṣopapatteḥ.*—NS. 5,1.17). (This can hardly be called an answer.)

It may be remarked that in the fallacy of neutralisation (*prakaraṇasama-hetvābhāsa*) the vacillation is due to the absence of decisive knowledge in regard to the true nature of the subject in question (and due to the mere existence of the counter-view), so the vacillation ceases as soon as that decisive right knowledge is acquired.

(16) *Ahetusama* (Parity per non-probativeness) is based on the contention that the probans as such cannot be established at any of the three points of time (*Traikālyāsiddher hetor ahetusamaḥ*—NS. 5.1.18). The probans is that which proves, and this could exist or be known either before or after or together with the probandum. In the first two cases nothing could be proved as one of the two would be absent. If the probans and probandum are held to exist or be known simultaneously, since both would be equally existent, which could be the probans of what? Thus the probans is not different from what is non-probative, and opposition based upon *sādharmya* with what is non-probative constitutes *ahetusama*.

Ahetu-sama can be met by saying that it is not true that the probans cannot be established at any of the three points of time because it is by the probans that the probandum is established. (*Na hetutaḥ sādhyasiddhes traikālyāsiddiḥ*.—NS. 5.1.19). The probans is the means of proving what is to be proved, just as the cause is the means of the accomplishing of what is to be accomplished and of the knowing of what is to be made known.[53] The proving of what is to be proved must be brought about by a cause, and never without it, and this cause is the probans. Further even according to the *jātivādin*'s stand there can be no denial and hence the probans being undeniable is firmly established (*Pratiṣedhānupapatteḥ pratiṣeddhavyā'pratiṣedhaḥ*.—NS. 5.1.20). The denial (*pratisedha*) also cannot exist before or after or together with what is to be denied, and thus the probans urged by the *vādin* cannot be denied, and so is firmly established. What has been urged against the *vādin*'s reasoning applies with equal force to the *jātivādin*'s argument.

Udayana differentiates between *ahetusama* on the one hand, and *prāpti-sama* and *aprāpti-sama* on the other by saying that though the denial of the relation of probans and probandum is there in all cases, (*a*) in the latter two the question is pointedly as regards the form of the probans, whether it is near the probandum or not, whereas in *ahetusama*, it is with regard to its efficiency in relation to the simultaneity or otherwise with the probandum. (*b*) In the latter two the *prāpti* (convergence) or *aprāpti* is with regard to the thing denoted by the probans and the probandum, while in *ahetusama* it is the verbal expression that is taken up for inquiry. The things denoted by the words might exist but could they be called effect and cause, or probans and probandum in relation to each other ? (*c*) In *prāpti-sama* and *aprāpti-sama* there are only two alternatives, while here we have three. (*d*) In *prāpti-sama* and *aprāpti-sama*, the potency as auxiliary causes is repudiated, while here the very nature of the cause is repudiated. (*e*) Those two have the semblance of the contention urging the absence of distinctness (between probans and probandum) and the like, while *ahetusama* urges only a contingency which is not favourable.[34]

(17) When the contrary conclusion is proved by means of *arthāpatti* (implication) it is a case of *Arthāpatti-sama* (Parity per implication) (*Arthāpattitaḥ pratipakṣa-siddher arthāpatti-samaḥ.*—NS. 5.1.21). For instance :

Argument—*Anityaḥ śabdaḥ prayatnānantarīyakatvād ghaṭavad.*

Counter-argument—*Yadi prayatnānantarīyakatvād anitya-sādharmyād anityaḥ śabda ity arthād āpadyate nitya-sādharmyān nitya iti, asti tv asya nityena sādharmyam asparśatvam iti.* (NB. 5.1.21). (If word is held to be non-eternal on the ground of its coming after effort which is its *sādharmya* with non-eternal things, it follows by implication that word must be regarded as eternal on the ground of *sādharmya* with eternal things which consists in the fact that it is intangible like eternal things).

Here the *jātivādin* overlooks the *vyāpti* between the probans and the probandum and takes it for granted that

word is said to be non-eternal, because jar with which it has *sādharmya* in respect of 'coming after effort' is also non-eternal, and if this be so, it is implied that it must be eternal like *ākāśa*, etc. with which it has *sādharmya* in respect of intangibility.

The answer to this counter-argument is that if without showing the capacity of words to yield the idea that is presumed, what is not expressly stated be taken as implied, then the renouncing of one's own view could be taken as following by implication, for the simple reason that it is not expressly stated. In this way the renouncing of the *jātivādin's* stand becomes possible. Further this *arthāpatti* would be inconclusive as it would apply equally to both views; the contrary of the argument put forward in the *jāti* could also be taken as following by implication. (*Anuktasyā'rthāpatteḥ pakṣahāner upapattir anuktatvād anaikāntikatvāc cārthāpatteḥ.*—NS 5.1.22). Moreover, *arthāpatti* does not follow from mere negation unless it is necessary to explain something. For instance, because a solid stone falls it does not necessarily follow by implication that water which is not solid does not fall (*na khalu vai ghanasya grāvṇaḥ patanam iti arthād āpadyate dravāṇām apām patanābhāva iti.*— NB. 5.1.22).

(18) If the presence of a single (common) property were to make two things non-different, then all things would have to be regarded as non-different, because the property of existence is present in all. This contention is a case of *Aviseṣa-sama* (Parity per non-difference). (*Ekadharmopapatter aviśeṣe sarvāviśeṣaprasaṅgāt sadbhāvopapatter aviśeṣa-samaḥ.*—NS. 5.1.23). The single common property 'coming after effort' being present in word (*śabda*) and in jar, if these two things be regarded as non-different in that both are non-eternal, then all things should have to be regarded as non-different because the one property of existence is present in all things.

We may remark that the *jātivādin* forgets that word and jar are regarded as non-eternal because they both have the property of 'coming after effort' which is invariably con-

comitant with non-eternality, and not because *sādharmya* in respect of one property is taken as entailing *sādharmya* in respect of other properties. Hence the answer to this *jāti* is, as the Sūtrakāra puts it, that this is not tenable, as in the case of some common property the presence of certain other properties of the *dṛṣṭānta* is possible, while in the case of others such presence is not possible (*kvacit taddharmopapateḥ kvacic cānupapatteḥ pratiṣedhābhāvaḥ* —NS. 5.1.24). Thus, in the case of the presence of 'existence' in all things, the invariable presence of no other common property is found possible, whereas if two things have the common property of 'coming after effort', further *sādharmya* between them in respect of 'non-eternality' is found possible. Uddyotakara rightly stresses here also that no such consideration makes a probans fallacious or valid. A valid probans is only that which is equipped with invariable concomitance positive and negative and not any other kind of probans (*uktaś ca viśeṣo'-nvaya-vyatireka-sampanno hetur netaraḥ iti* —NV. 5.1.24).

Uddyotakara shows the difference between *sādharmya-sama* and *aviśeṣa-sama* that the former is based upon *sādharmya* in respect of one property only, whereas the latter is based on *sādharmya* on all points (*eka-samastabhedād bhedaḥ eka-sādharmyāt sādharmyasamā samastasādharmyād aviśeṣa-sameti.* —NV. 5.1.23).

Udayana in his *Bodhasiddhi* notices a different interpretation of this *sūtra*: The single property that constitutes the probans is really effective, so that if the subject (*pakṣa*) and the example (*dṛṣṭānta*) were taken as possessed of the probandum in common then they would be non-different in every way (*sarvāviśeṣaḥ*) because they are known to have the probandum.[35] And then there would be non-difference between the *pakṣa* (e.g. word) and the *dṛṣṭānta* (e.g. jar). If like jar, word has non-eternality, it must also have *ghaṭatva* (jarness). If the *dṛṣṭānta* helps us to know one of its attributes, it must also make known other attributes. Udayana does not approve of this interpretation, for if *aviśeṣa-sama* be such it could be included in *utkarṣa-sama*.

(19) *Upapatti-sama* (Parity per evidence) is based upon the presence of grounds for both views (*Ubhaya-kāraṇopapatter upapatti-samaḥ.*—NS. 5.1.25). For instance, if word be held to be non-eternal because there is ground or evidence for its non-eternality, then there is ground for its eternality also in the shape of intangibility (*asparśatva*), so it may be regarded as eternal also.

Uddyotakara says that the difference between *upapatti-sama* and *prakaraṇa-sama* is that whereas in the former the grounds for eternality and non-eternality are simply stated as present in the same thing, in the latter, the opposition consists in the putting forward of the two contrary views in detail.[36] In the former the full reasoning is not stated in detail, the grounds for the two conclusions being merely indicated, while in the latter the two views are set forth fully. In the former, says Udayana, the opponent just suggests that there can be a contrary argument, while in the latter he is concerned with proving the contrary view.[37] Jayatīrtha is not inclined to accept *upapatti-sama* as a distinct variety of *jāti* (PP., p. 70).

The answer to *upapatti-sama* is that this rejoinder has no force because the presence of grounds in support of the original proposition is admitted even by the opponent when he speaks of the presence of grounds for both views. He admits that there are grounds for non-eternality, and therefore he cannot deny it. * If it be urged that denial is due to contradiction (*vyāghāta*) of the possibility of both eternality and non-eternality, this *vyāghāta* applies as well to the *jātivādin's* view as to that of the *vādin*, and it cannot establish any one of the two views. If the presence of grounds for both views be admitted, the truth of the original proposition also is accepted, whereas if the presence of the said ground be denied in the case of the original argument, the

* This is a frivolous answer where the intention of the speaker is not taken note of and he is trapped with a part of his expression. It is a case of a sort of *chala*.

ground for the *jātivādin's* argument also is denied, and thus the *jāti* stultifies itself. (*Upapatti-kāraṇābhyanujñānād apratiṣedhaḥ.*—NS. 5.1.26).

(20) *Upalabdhi-sama* (Parity per apprehension) is based on the fact that what is attempted to be established is found to exist even in the absence of the cause mentioned (*Nirdiṣṭa-kāranābhāve'py upalambhād upalabdhi-samaḥ.*—NS. 5.1.27). For instance, even in the absence of the character of coming after effort which is mentioned as the cause (i.e. ground) of non-eternality, this non-eternality is found in that *śabda* (sound) which proceeds from the breaking of the branches of the tree shaken by the wind, this *śabda* not being the product of the effort of any person.

Uddyotakara says that what *upalabdhi-sama* does is to attribute to the *vādin* the view that what he says applies to all kinds of the *pakṣa* or subject (e.g. all sounds and not to a particular kind of sound, the letter-sound only as the *vādin* meant it)* and then to show that the probans is not invariably concomitant with the probandum, as the said probandum is found to exist even in the absence of the probans and the probans is not found in all cases and kinds of the *pakṣa* (*sarvasādhyāropeṇā'vyāpakatvaṁ sādhanasyety upalabdhisamārthaḥ.*—NV. 5.1.27). Thus the probans may also be shown to be not invariably concomitant with what is expressed by the terms of the proposition as it is propounded (i.e. with the *pakṣa*). For instance, the original argument being 'sound+ is non-eternal, because it is productive of another sound' (*anityaḥ śabdaḥ śabdāntarotpādakatvāt*), it is objected that the character of 'being productive of another sound' is not found in all sounds, the last sound of a series not being productive of another sound.[38] This is true even of the example cited in the *Bhāṣya* as the character

* This is a good example of *chala*.

\+ What is meant is the sounds except the last (see NVTT., p. 686—*Yady apy anityaḥ śabda iti śrūyate tathā'pi sāmarthyād ādya iti vivakṣitaḥ*).

of 'coming after effort' is not found in the sound proceeding from the breaking of the branches of a tree shaken by the wind.

The answer to this rejoinder is that as the property in question may be due to some other cause, the denial has no force. (*kāraṇāntarād api taddharmopapatter apratiṣedhaḥ.*— NS. 5.1.28). When the first party says '*śabda* is non-eternal because it is the product of effort,' what is meant is that it is produced from some cause, it is not meant to restrict the *śabda* to one particular cause only; hence if the property in question, viz. 'non-eternality' is found in *śabda* (sound) produced from some other cause it in no way goes against the position of the *vādin*. Uddyotakara says that the *vādin* does not intend to deny that other kinds of the *pakṣa* can be due to other causes, or say that the *pakṣa* has not other causes.

It may be remarked that Uddyotakara tries to explain that *upaladbhi-sama* has the characteristic of a *jāti* inasmuch as what it urges is the similarity of the probans to what is not a probans (*ahetusāmānyāi jātiḥ*—NV. 5.1.28).

Udayana understands *upalabdhi-sama* as imposing the idea of restriction or limitation on the expression of the *vādin*, which is not intended by him, and refuting him by putting forward different alternatives and showing their incompatibility (*Tasmād vādivākyasyāvadhāraṇe tātparyam āropyāvadhāraṇaṁ vikalpya dūṣaṇam upalabdhi-sama ity Udayanaḥ.*-PP., p. 71; also VV., p. 28). Udayana thus mentions five kinds of *upalabdhi-sama* :

(*a*) The subject is found even in the absence of the probandum which makes it a case of the urging of *bādha* or the fallacy of contradiction. For instance, when the proposition is 'Mountain has fire', it is urged: Does this mean that the mountain alone is fiery or that mountain is only fiery? It cannot mean the former as the kitchen, etc. also have fire; nor the latter for the mountain is found at times to exist even when there is no fire on it.

(*b*) The subject is found without the probans, this being a case of the fallacy of *asiddha*; e.g.

Argument—Mountain has fire, because it has smoke.

Counter-argument—Is the smoke connected with the mountain to the exclusion of all other factors (*anyayoga-vyavacchedena*) or so as to be always connected with it (*ayoga-vyavacchedena*)? It cannot be the former, because bulls also are found to be associated with the mountain; nor can it be the latter for even the smoke is found only at times and not always on the mountain.

(*c*) The subject is found to exist without both probans and probandum. This is an amalgamation of the first two. Here both *asiddha* and *bādhita* are urged.

(*d*) The probandum exists without the probans, this being a case of *avyāpti* as the probans is not invariably found (as the mark) where the probandum is present. For instance, the original argument being 'Mountain has fire because it has smoke', it is opposed by saying: What is meant here—that the mountain alone has fire, or that mountain has only fire, or that fire can be inferred from smoke alone? It cannot be the first as kitchen, etc. also are found to be such, nor can it be the second as trees also are found there, nor can it be the third as fire can be known from light also.

(*e*) The probans exists without the probandum, in which case the necessary concomitance between the two would be wanting, and it is a case of *ativyāpti*. For instance, the argument being 'This is fiery, because it is a substance', it is opposed by saying: Does this mean that it is fiery only; or that it is fiery, only because it is a substance? It cannot mean the former because conjunction, etc. also are possible on account of its being a substance; nor the second because other *liṅgas* (marks of inference) also are possible.

It may also be noted that such a refutatory rejoinder to the original argument based on positive as well as negative concomitance would be justified, so it could not be a *jāti*

(sophistical refutation). But the cases of purely negative concomitance can provide examples of this type, e.g. Diṅnāga's urging the fault of *avyāpti* and *ativyāpti* (the definition being too narrow or too wide) in connection with the definition of *pratijñā* or thesis ('*sādhyanirdeśaḥ pratijñā*' — the two alternatives being '*sādhya-nirdeśa eva pratijñā*' and '*pratijñaiva sādhya-nirdeśaḥ*) (see BS, pp. 54–55 and commentary).

(21) *Anupalabdhi-sama* (Parity per non-apprehension). We may say something by way of introduction before we define this *jāti*. The *vādin* argues that it is not true to say that word exists even before it is uttered and that if it is not heard, it is simply because there is non-apprehension of it due to some obstruction. We do not perceive any obstruction or any such cause of non-apprehension. In the case of such things as underground water and the like, if there is non-apprehension of them it is due to the presence of obstruction (viz. surface of the ground under which the water lies); but in the case of word we do not find its non-apprehension to be due to the presence of obstruction or any such cause of non-apprehension which would have certainly been perceived if it existed, as the surface of the ground is perceived. Therefore, it follows that word is non-existent before it is uttered. To this the opponent (i.e. the *jātivādin*) gives the following rejoinder : As the non-apprehension of the obstruction is also not apprehended it follows that this non-apprehension is non-existent, and this proves the contrary, viz. existence of the obstruction. Opposition based on this contention is *Anupalabdhi-sama* (Parity per non-apprehension). (*Tadanupalabdher anupalambhād abhāva-siddhau tad-viparītopapatter anupalabdhi-samaḥ.*—NS., 5.1.29.)

It may be noted in passing that Udayana gives a wider interpretation of this *jāti* and makes it apply to all properties such as apprehension–non-apprehension (*upalabdhi-anupalabdhi*), hatred–non-hatred (*dveṣa-adveṣa*), production–non-production, etc. which refer to an object and which are relative in

character. For instance, the original argument being 'The ground has a jar on it because it is apprehended as having it (*bhūtalaṁ ghaṭavad tadvattayopalabdheḥ*), the *jātivādin* argues : "That is said to be apprehended with reference to which there is apprehension in the form of apprehension. Is apprehension present with reference to itself in the form of apprehension or not? If it be present it should be apprehended like an object, and then it would be non-apprehension, thus there would be *svarūpāsiddhi*. If it be not present with reference to itself in its own nature, then it would not be apprehension. Similarly, is non-apprehension present with reference to itself in the form of non-apprehension? If it be present it should be non-apprehended like an object, and so should be absent, that is to say, should be of the nature of apprehension which is its opposite. If not, then not subsisting in itself in its own form, it would not be non-apprehension at all. In either case, the probans adduced 'because of non-apprehension' would be *asiddha* (unreal). Such arguments can be advanced in respect of *icchā-anicchā*, *dveṣa-adveṣa*, etc. also. Further, it is said that inference functions with respect to a doubtful thing, and a doubtful thing is an object of doubt. Is doubt present with reference to itself in this form or not? If it is, then being itself doubtful how could it render the object doubtful? And if not, it would not be doubt at all.

Similarly, when the original argument is 'Mountain is fiery because it is smoky,' it can be urged, "Does the mountain subsist in itself in its own nature? If it does, there would be the contingency of *ātmāśraya*; if it does not then what is in itself a non-mountain cannot be a mountain as this involves contradiction." This *jāti* is according to Udayana based on the urging of the impossibility, in the case of properties referring to an object, of the presence or absence of one's own character with reference to one's self. (See BS, pp. 56-60; TR, pp. 293-298; VV., p. 28). This *jāti* can be more aptly termed *viṣayidharmasamā*, the name *anupalabdhisamā* being given in view of one of its forms.

The answer to the above *jāti*, says *Akṣapāda*, is as follows: Since non-apprehension is of the nature of negation of apprehension, the reason urged is no reason at all (*Anupalambhātmakatvād anupalabdher ahetuḥ.*—NS., 5.1.30). What is meant is that what exists forms the object of apprehension and this by reason of its being apprehended is asserted to be existent; while of the non-apprehension here the object is that which does not exist and this by reason of its being not apprehended is declared to be non-existent. The non-apprehension of the non-apprehension cannot negate the non-apprehension; operating as it does upon its own objective, which is non-apprehension, it cannot negate that objective, and when the non-apprehension of obstruction is not negated it can serve as an effective probans for proving the non-existence of the obstruction.[39] As the *Nyāya-mañjarī* points out, what is negated by a negation must be something positive; apprehension proves the existence, and non-apprehesion the non-existence of only positive entities; hence even the non-apprehension though it be of the non-apprehension of obstruction can prove the non-existence only of the obstruction and the apprehension which are positive entities, and not of the non-apprehension itself.[40] Further the presence and absence of one's several cognitions and experiences are clearly perceptible by every person, so no apprehension of non-apprehension is necessary (*jñāna-vikalpānāṁ ca bhāvābhāvasaṁvedanād adhyātmam.*—5.1.31.) (see BS., p.62).

(22) If on account of *sādharmya* two things be regarded as having analogous properties, then all things should have to be regarded as non-eternal. This contention constitutes *Anitya-sama* (Parity per non-eternality) (*sādharmyāt tulya-dharmopapatteḥ sarvānityatvaprasaṅgād anitya-samaḥ.*—NS., 5.1.32.). For instance, when the *vādin* says that *śabda* should be regarded as non-eternal due to its *sādharmya* with jar which is non eternal, he is faced with the contingency of having to regard all things as non-eternal owing to their *sādharmya* (consisting of 'existence') with the jar. It may

be noted that this *jāti* is based on *sādharmya*, but it also includes a similar rejoinder based on *vaidharmya* as pointed out by Udayana. For instance, when the *vādin* says that *śabda* should be regarded as non-eternal owing to its *vaidharmya* from *ākāśa*, then all the three worlds should have to be regarded as *anitya* on account of *vaidharmya* from it. Similarly, if owing to *sādharmya* with the kitchen, the mountain be said to have fire, then owing to *sādharmya* with it, everything in the universe should be regarded as having fire It can be seen that this *jāti* is concerned with urging the contingency of the possession by all things of an analogous property by reason of *sādharmya* with, or *vaidharmya* from, a particular thing in respect of some property. Hence a more significant name than *anitya-sama* is *sādhyadharma-sama*. *Anityasama* is different from *aviśeṣa-sama* in that the latter urges the non-difference of all things whereas the former urges that even *vipakṣas* (heterologues) would become *sapakṣas* (homologues) and vice versa on account of the possession of an analogous or different property by reason of *sādharmya* with, or *vaidharmya* from, a particular thing in respect of some property.[41] Jayatīrtha holds that *anitya-sama* should be included in *aviśeṣa-sama* and not accepted as a distinct variety (PP., p. 72).

The answer to the above rejoinder is that if rejection of a thesis is to be based on the ground of *sādharmya* of all things in respect of a particular property, it would mean that rejection is based on *sādharmya*, and the rejection of the rejoinder or denial also would follow, inasmuch as the denial has *sādharmya* with the original argument in that both are equipped with the factors of reasoning, *pratijñā* (proposition), etc. (*sādharmyād asiddheḥ pratiṣedhāsiddhiḥ pratiṣedhya-sādharmyāt*—NS., 5.1.33).

This answer puts the *prativādin* on the same footing as the *vādin*. The real answer is that what serves as the probans is that property which is definitely known to subsist in the example (*dṛṣṭānta*) as being an infallible indicator of the probandum; and since such a probans can be of both kinds,

necessarily concomitant with certain properties and not so with others, there cannot be non-difference of all things and all things will not be *sapakṣas* or *vipakṣas*, there can be no non-difference among all things (*Dṛṣṭānte ca sādhya-sādhana bhāvena prajñātasya dharmasya hetutvāt tasya cobhayathā bhāvān nāviśeṣaḥ*, — NS., 5.1.34). It is only a particular form of *sādharmya* that constitutes the real probans and not just mere *sādharmya* or mere *vaidharmya* (*evaṁ sādharmya-viśeṣo hetur nāviśeṣeṇa sādharmya-mātraṁ vaidharmya-mātraṁ vā.* — NB.,5.1.34). What can rightly prove a conclusion is only such *sādharmya* or *vaidharmya* as is invariably concomitant with the probandum. The *sādharmya* adduced by the *jātivādin* as the probans proving the non-eternality of all thing is 'existence' which is not invariably concomitant with non-eternality, because there are several things which are existent and yet are eternal.

In addition to this what has been said in answer to *aviśeṣa-sama* in NS., 5.1.24 applies equally here also.

(23) *Nitya-sama* (Parity per eternality) is based on the contention that the character of non-eternality being eternal, it follows that the non-eternal thing is itself eternal (*nityam anityabhāvād anitye nityatvopapatter nityasamaḥ*—NS. 5.1.35). The original proposition being 'word (*śabda*) is non-eternal', in opposition the *jātivādin* urges : Is this non-eternality eternal in word, or is it non-eternal ? If it is present in word, at all times, then since the property 'non-eternality' is everlasting, the thing to which this property belongs, viz. word, must also be everlasting; that is to say, word must be eternal. If, on the other hand, the property (non-eternality) is not present in word at all times, then since non-eternality would be at some time or the other absent in word, word would be eternal.This opposition based upon eternality constitutes *Nitya-sama* (Parity per eternality).

Udayana interprets this *jāti* in a wider sense. The mention of 'non-eternality' is meant to include all

properties. He defines *nityasama* as follows :— When the opponent urges that a particular property intended to be proved cannot fulfil any of the alternatives of its having a particular character or otherwise, and so the subject cannot have this property, it is a case of *nitya-samu*, the name being secondarily applied tu cases other then those based on eternality.[42] The alternatives are, for example, eternal-non-eternal, different–non-different, effect–non-effect, existence-non-existence, real–unreal, enduring–non-enduring, one–many; other alternatives like dependence–independence, expressible-inexpressible, known–unknown, desired–undesired, efficient-inefficent. etc. being included in these. For instance, the proposition being 'word is non-eternal', the *jātivādin* urges : Is non-eternality an effect or a non-effect ? If it be an effect, it could not be produced along with word, for otherwise they could not be the property and the thing having the property; hence also it could not be produced earlier than word. If it were produced later, word would initially be without it and so would be eternal. And thus there would be no scope for non-eternality, as the two are contradictory. If it be not an effect, its substratum (e.g. word) would also not be an effect. Still how could non-eternality be eternal as the two are contradictory ?—and so on. Such arguments by putting forth alternatives and showing that no property can be proved in respect of a thing are very common in works concerned with the refutation of rival views, e.g. Candrakīrti's *Vṛtti* on the *Mādhyamika-kārikā*, *Tattvopaplavasiṁha* of Jayarāśi, *Vādāvalīs*, *Advaitasiddhi* of Madhusūdana Sarasvatī and the like.

Another instance of *nitya-sama* would be : A jar is so called because it is possessed of jar-ness (*ghaṭatva*). Is this jarness eternal or non-eternal ? If it be eternal, its substratum jar also would come to be eternal. If it be non-eternal it could not be of the nature of generality (*sāmānya*).[43]

The answer to this *jāti* is that inasmuch as while setting forth the atternatives of the everlasting character of non-

eternality and the like, the non-eternality in the subject of denial (e.g. word) is admitted by the *jātivādin*, there can be no denial of it (*Pratiṣedhye nityam anityabhāvād anitye-nityatvopapatteḥ pratiṣedhābhāvaḥ*. NS., 5.1.36). In fact, what is meant by word being non-eternal is that it is produced and ceases to exist on being destroyed, and there can be no scope for such a question as 'Does this non-eternality subsist in word at all times or not?' Word is not the container (*adhikaraṇa*) and non-eternality the contained (*ādheya*) because such a conception would involve self-contradiction in terms.

As the *Nyāyamañjarī* says, if non-eternality be contained in word, then alone could there be any meaning in the contention that if the former is eternal, the latter also should be so, as the former could not subsist without the latter. But as a matter of fact, the relation of container and contained does not subsist between word and non-eternality, for such a relationship belongs only to positive entities, and non-eternality (which is equivalent to destruction or *pradhaṁsābhāva*, posterior negation) is purely negative, it is determined by word but does not subsist in it.[44] Uddyotakara succinctly puts it thus : No question can be put as regards the eternality or otherwise of non-eternality, as non-eternality is not admitted as a distinct property. (*Praśnānupapattiś ca pṛthagdharmatvenā' nityatvasyā' nabhyupagamāt.*—NV., p. 546). Further, eternality and non-eternality are contradictory and so the denial cannot be accepted. That these should belong to one entity is an impossibility. Hence the argument of the opponent conveys no sense at all.[45]

(24) *Kārya-sama* (Parity per character of effect) is based on the diverse character of the products of effort. (*Prayatna-kāryānekatvāt kārya-samaḥ.*—NS., 5.1.37). For instance, the original proposition is : Word is non-eternal because it is the product of effort (*śabdaḥ anityaḥ prayatnānantarīyakatvāt*). The opposition to this can be urged as follows : 'Being a product of effort' signifies that a thing not having previous existence comes into existence, whereas 'non-eternality'

signifies that a thing having come into existence ceases to exist. Such being the condition of things, *kārya-sama* is based on the diverse character of the products of effort. The fact of 'coming into existence after effort' we notice in two different circumstances, e.g. production of jar, and manifestation of things concealed under some obstruction by the removal of this obstruction by means of effort. There is no special reason to show whether sound actually comes into existence after effort, or is simply manifested after effort.

Opposition based on the fact of both production and manifestation being equally the products of effort constitutes *Kāryasama*:

The answer to this *jāti* is that even though there are various kinds of effects, effort cannot be regarded as the cause (of the manifestation of e.g. word), as there is not present any cause of its non-apprehension (*karyānyatve prayatnāhetutvam anupalabdhikāraṇānupapatteḥ* —NS., 5.1.38).* In the case of word there is no cause of non-apprehension, by the removal of which as a result of effort there could come about the manifestation of word. Therefore, word is produced, and not manifested, by effort.

Kāryasama is different from *saṁśaya-sama* which is based upon *sādharmya* with both kinds of things, this not being the case with the present rejoinder. It also differs from *sādharmya-sama* in that the latter does not proceed on the basic of an assumed probans, whereas in the former (*kārya-sama*), the probans which has been stated by the *vādin* in one form (viz. 'because it is produced after effort') is altered into a totally different form (viz. 'because it is perceived after effort'), as the *Vārttika* says.[46]

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* This is how the *Nyāya-mañjarī* reads the *sūtra*. The *Bhāṣya* reads the last term as '*anupalabdhikāraṇopapatteḥ*' meaning where a thing is only manifested after effort, causes of non-apprehension are present (not so in the case of word).

Udayana feels that this *jāti* as stated by the *Bhāṣya* is a correct answer as the two possibilities of a thing being produced or manifested are certainly there, and so cannot be regarded as a *jāti* (which is *asad-uttara*). Hence *kāryasama* is that in which urging the unreality (*asiddhatva*) of one of the factors of reasoning, viz. *pakṣa, hetu, dṛṣṭānta,* one imagines something which can establish it and then pointing out a defect in it proves that it cannot establish (*pakṣa-hetu-dṛṣṭānteṣu madhye kasyacid anumānāṅgasyāsiddhatvam udbhāvya tatsādhakatayā kiñcit svayam utprekṣya tad-dūṣaṇenaiva tat-sādhakābhāvopasaṁhāraḥ kāryasameti.*–BS., p. 72). For instance, the original argument being 'Word is non-eternal, because it is brought about' (*anityaḥ śabdaḥ kāryatvād*), the *jātivādin* urges : 'It is not established that it is a *kārya* (something brought about); a thing may be said to be a *kārya* on accouut of its coming after effort; but a thing may be even manifested after effort. Therefore the *hetu* is *asiddha*'. Jayatīrtha would regard this as a case of *chala* (i.e. *sāmānya-chala*), as something not intended by the *vādin* is imposed on him (see PP., p. 73).

Coming to the Buddhist and Jaina discussions on *jāti*, we may note that these schools define *jāti* as *dūṣaṇābhāsa* (semblance of refutation). In the fourth chapter (pp. 26–30) of the *Upāyahṛdaya*, twenty *dūṣaṇas* (refutations based on *sādharmya* and *vaidharmya*) are given instead of the twenty-four *jātis* of the *Nyāya-sūtra*, *sādharmya* and *vaidharmya* being separately enunciated in the beginning on account of their being the fundamental principles on which most of the types of *jāti* are based. They are (1) *Utkarṣasama*, (2) *Apakarṣasama*, (3) *Bhedābhedasama*, (4) *Praśnabāhulyam-uttarālpatā*, (5) *Praśnālpatā-uttarabāhulyam*, (6) *Hetusama*, (7) *Kāryasama*, (8) *Vyāptisama*, (9) *Avyāptisama*, (10) *Kālasama*, (11) *Prāptisama*, (12) *Aprāptisama*, (13) *Viruddha*, (14) *Aviruddha*, (15) *Saṁśayasama*, (16) *Asaṁśayasama*, (17) *Pratidṛṣṭāntasama*, (18) *Śrutisama*, (19) *Śruti-bhinna*, (20) *Anutpattisama*.[47]

The new names that figure in this list are—*bhedābheda-sama, praśnabāhulya–uttarālpatā, praśnālpatā-uttarabāhulya, hetusama, vyāptisama, avyāptisama, kālasama, viruddha, aviruddha, asaṁśayasama, śrutisama* and *śruti–bhinna*. Of these *kālasama* is the same as the *ahetusama* of the *Nyāya-sūtra*. We may give here a brief account of the others :

(3) *Bhedābhedasama*[48] (Parity per difference–non-difference) is based on the repudiation of the *dṛṣṭānta* (example) whether it be regarded as non–different or different from the *pakṣa* (subject). The original argument being— The soul is eternal because it is insensible, like *ākāśa* (*Ātmā nityaḥ indriyānupa-labdheḥ. ākāśo hy anupalabdher nityaḥ.*—UH., p. 27), this is attempted to be refuted by a counter–argument : Here if soul and *ākāśa* be regard as non–different, then having identical properties, how could *ākāśa* serve as a *dṛṣṭānta* for the soul ? If they be regarded as different then they could not have *sādharmya* with each other and so one could not serve as a *dṛṣṭānta* for the other.

(4) *Praśnabāhulyam–uttarālpatā*[49] This is illustrated as follows : The original argument is, "Soul is eternal, because it is insensible, as the *ākāśa* being such is eternal." The counter–argument is : How can this be proved when what is insensible is not necessarily eternal ? This is a case in which the original argument (*praśna*) being put forth in detail, the answer to it is a brief one attempting to cut at the very root of it.

(5) *Prāśnālpatā–uttarabāhulya*,[50] where the original argument being brief, is refuted at length. For instance :

Original argument—Soul is eternal, because it is insensible.

Counter–argument—Insensible things are of two kinds, e.g. (*a*) atoms which are insensible but are non-eternal (—according to the Buddhists), and (*b*) *ākāśa* which is insensible and eternal So how can you say that soul is eternal because it is insensible ?

These two (4-5) pertain more to the method of propounding the argument or the counter-argument, than to the logical flaw in the counter argument. Still since the author supplies no information, the names seem to be a bit intriguing. Can they mean reading less than what is meant or reading more than what is meant?

(6) *Hetusama*[51]—(Parity per Reason). For instance:
Argument—as in (4).
Counter argument—*Ākāśa* and soul are different, so how could the insensibility of both be a reason?

The *jātivādin* says to the *vādin*, "How can the probans which is the property of both *pakṣa* and *dṛṣṭānta* which are different, be a probans?"

Here it is suggested that *sādharmya* in respect of one property between things of two different classes cannot lead one to infer *sādharmya* in respect of another. The *jātivādin* overlooks the fact that inference is possible if there is the relation of causality or identity between the property which serves as the probans and that which is to be proved.

(8) *Vyāpti-sama*[52]— (Parity per extension or pervasion)-For instance:
Original argument—*Ākāśa* is eternal, because it is insensible.
Counter-argument—Now, *ākāśa* is all-pervading, so would it mean that all things are insensible?

This *jāti* is based on the attributing of the properties of an all-pervading entity to everything whatsoever.

(9) *Avyāpti-sama* [53] (Parity per non-pervasion) — For instance:
Original argument—Soul is eternal because it is insensible.
Counter-argument—The non-pervading atom though it is insensible, is non-eternal, so how could the soul which is insensible be eternal?

This *jāti* seems to be based on the analogy of *avyāpti*, or of non-pervading things as the earlier one was based on that of all-pervading things.

(13) *Viruddha*[54] (Contrary) is based on the argument that the property of a greater part should apply to the whole. For instance :

The original argument is—Everything is non-eternal; but the soul is not everything, so it is eternal. *

Counter-argument—You should have said that soul is non-eternal because it is (part of) everything. Blanket which is somewhat burnt is said to be unburnt when the major portion of it is unburnt.

Does the *jātivādin* want to say to the *vādin* that his argument proves the contrary of what he wants to prove?

(14) *Aviruddha* (Non-contradictory).[55] For instance :

Argument—Soul is like *ākāśa* because it is insensible :

Counter-argument—*Ākāśa* has no sensuous experience, so the soul also should not have it; and if the soul be said to have sensuous experience, then *ākāśa* also should experience pleasure, pain, etc. as the soul and *ākāśa* are non-different.

This *jāti* is based on the argument that *sādharmya* of two things in respect of one property entails *sādharmya* in respect of all properties irrespective af *vyāpti.* This corresponds to *aviśeṣasama* of the *Nyāya-sūtra.*

(16) *Asaṁśayasama*[56] (Parity per non-doubt)—This is based on the argument that if a thing is not apprehended its existence or reality can be proved only if the cause of non-apprehension is pointed out. For instance :

Argument—Soul is (though it is not perceived), because it is insensible.

Counter-argument—On account of what obstruction is there non-apprehension of it? The cause of non-apprehension must be pointed out; if there is no such cause, then the soul cannot be a real entity.

* Prof. Tucci says, "This is in fact *pratijñāvirodha* and such a thesis was considered by Diṅnāga in *Nyāyamukha* as *viruddha pakṣābhāsa.*" Notes, p. 22 *(Buddhist Texts on Logic).*

The *jātivādin* forgets that an insensible may remain unapprehended even without an obstruction. This *jāti* does not correspond to *anupalabdhisama* of the *Nyāya-sūtra*. As Prof. Tucci says: This is at variance with it, almost its opposite.

(18) *Śrutisama*[57]-Parity per *śruti* (testimony)-For instance:

Argument—Soul is known to be eternal as the *sūtras* speak of its insensibility.

Counter-argument—But it is also stated in the *sūtra* that 'the soul is not'. And the *Nirgrantha* religion speaks of soul as non-eternal. If it were definitely accepted that soul is eternal, the conflicting opinions of the *sūtras* would remain unaccounted for.

This *jāti* is based on the different views on the same topic expressed in *śruti* texts which are equally authoritative; acceptance of one *śruti* would create difficulty.

(19) *Śruti-bhinna*[58] (difference in the different *śrutis*)—For instance, the *prativādin* argues that if the *vādin* knowing and accepting only one *sūtra* text regards the soul as non-eternal then on the basis of the knowledge of other *sūtras*, the soul can be regarded as eternal, and if it be said that there should be cognition in both ways then one and the same soul should come to have both eternality and non-eternality. This *jāti* also is based on the difference of views expressed in the *śruti* texts on the same topic; only it urges a further difficulty if one deliberately accepts either or both of the conflicting texts.

The *Tarkaśāstra* (pp. 12-30) (ascribed perhaps wrongly to Vasubandhu) gives a three-fold division of faulty refutation (—same as *jāti* of the *Naiyāyikas*): (*a*) *viparīta-khaṇḍana*, refutation which is not in agreement with facts (*yadi pratiṣṭhāpitaṁ khaṇḍanaṁ samyagarthena na samyuktaṁ syāt tadā tad viparīta-khaṇḍanam ity ucyate.*—TS., p. 12); (*b*) *asat-khaṇḍanam*, refutation based on wrong or meaningless statement (*aparam asatkhaṇḍanam, mithyāvacanād asat. mithyāvacanaṁ tv ayathārtham anarthakaṁ ca. etad ucyate' satkhaṇḍanam.*–TS.,

p. 24); (*c*) *viruddha-khaṇḍanam*, refutation urged in a statement involving contradiction (*artha-visaṁvādakaṁ viruddham ity ucyate, yathā prabhāndhakārau sthiti-gatī visaṁvādake. tad viruddha-khaṇḍanam ity ucyate.*—TS., p. 28). It may be noted that the *Tarkā-śāstra* uses the word (*doṣopeta*)*khaṇḍana* (faulty refutation) for the *jāti*-type of refutation of the *Nyāya-sūtra*.

(*a*) *Viparīta-khaṇḍana* is ten-fold—(*i*) Refutation on the basis of *sādharmya*, called *sādharmya-khaṇḍana*; (*ii*) *vaidharmya-khaṇḍana*, (*iii*) *vikalpa-khaṇḍana*, (*iv*) *aviśeṣa-khaṇḍana*, (*v*) *prāptyaprāpti-khaṇḍana*, (*vi*) *ahetu-khaṇḍana*, (*vi*) *upalabdhi-khaṇḍana*, (*viii*) *saṁśaya-khaṇḍana*, (*ix*) *anukti-khaṇḍana*, (refutation based on non-statement), (*x*) *kāryabheda-khaṇḍana* refutation based on the difference of result or function of the subject (*pakṣa*) and the example (*dṛṣṭānta*).[59]

It can be seen that of these *anukti-khaṇḍana* and *kārya-bheda-khaṇḍana* are not found in the *Nyāya-sūtra*.

(*ix*) *Anukti-khaṇḍana*[60]—There is absence of non-eternality as it is not stated before.

Argument—Word (*śabda*) is non-eternal because it is the outcome of effort (*anityaḥ śabdaḥ prayatna-samutpannatvāt*).

Counter-argument—If the assertion 'effort' be regarded as the cause of the non-eternality of word, then what does this come to? It would only come to this that if 'effort' be not stated, word would be eternal. Being non-eternal before, how could it be eternal now? That is to say, if the statement of the reason 'because it is the outcome of effort' is the cause of the non-eternality of word, then word will not be non-eternal when the reason is not stated.

This can be met by saying that this is *viparīta-khaṇḍana*. The reason put forth only manifests or indicates what is to be proved, it is not meant to generate or destroy it. The refutation put forth can be said to be successful only if the proof set forth by the *vādin* is demolished, but it is only a

semblance of refutation (*khaṇḍanābhāsa*) to say that non-eternality would not be there if the reason remains unstated. If the *prativādin* tries to refute the *vādin's* position by saying that the statement of proof is the cause of destruction then it would be a case of *viparīta-khaṇḍana*.

(x) *Kāryabheda-khaṇḍana*[61]—Refutation on the basis of difference of function or result brought about by the *pakṣa* and the *dṛṣṭānta*. For instance :

Argument—Word (*śabda*) is non-eternal, because it is brought about, like a jar.

Counter-argument—Word and jar bring about different results and so they cannot possibly have the same property of non-eternality.

The answer to this is that the *vādin* does not want to say that word is non-eternal because it serves the same purpose as jar, what he wants to say is that all things that are brought about are non-eternal. Smoke though different serves as an indicator of fire, similarly jar can serve to manifest the non-eternality of word. Another instance is :

Argument—Word is eternal because it resides in *ākāśa* which is eternal. If the *āśraya* (substratum) is eternal, the property must be eternal, as for example *pārimāṇḍalya* in *paramāṇu*—*paramāṇu* being eternal, *pārimāṇḍalya* also is eternal. Word also must be eternal because it resides in the eternal *ākāśa*. Moreover, word must be eternal on account of its audibility (*śrāvaṇatva*); 'wordness' (*śabḍatva*) is apprehended by the organ of hearing and is eternal, so word too is eternal due to that very reason.

The *Vaiśeṣika* gives a rejoinder to this : If word is established as eternal by a *hetu* (reason, cause) then since it is created by a cause, it is non-eternal. Therefore, word is non-eternal.

Here the *jātivādin* assumes that the *hetu* put forth is a *kāraka* (originating) cause, while it is simply a *jñāpaka*

(indicator) *hetu*, and therefore refutes accordingly; hence this is a case of *viparīta-khaṇḍana*, as it tries to establish or prove a fault in the reasoning by assuming the opposite (*viparyayeṇa taddoṣasthāpanāt*.—TS., p 24).

It may be observed that the treatment of (*viii*) *saṁśaya-khaṇḍana* is different from that of *saṁśaya-sama* in the *Nyāya-sūtra*. *Saṁśaya-khaṇḍana* corresponds to *kārya-sama* of the *Nyāya-sūtra*. Diṅnāga's and Dharmakīrti's interpretation is in agreement with that of the *Tarkaśāstra*.[59] *

(*b*) *Asat-khaṇḍana* is of three kinds: (*xi*) *avarṇya* (*vyañjaka*)-*khaṇḍana*, (*xii*) *arthāpatti*(*vyañjka*)*khaṇḍana*, (*xiii*) *prati-dṛṣṭānta*(*vyañjaka*)*khaṇḍana*.[62] These are substantially the same as *avarṇya-sama*, *arthāpatti-sama* and *pratidṛṣṭānta-sama* of the *Nyāya-sūtra*.

(*c*) *Viruddha-khaṇḍana* again is of three kinds—(*xiv*) *anutpatti-khaṇḍana*, (*xv*) *nityatā-khaṇḍana*, (*xvi*) *svārtha-viruddha-khaṇḍana*, this last not being found in the *Nyāya-sūtra*.[63] If in refuting the *vādin*'s thesis the *prativādin* contradicts his own position, it is a case of *svārtha-viruddha-khaṇḍana*. For instance:

Vādin—Word (*śabda*) is non-eternal, because it is generated like a sprout.

Prativādin—If the *hetu* (reason) unites with non-eternality then it would be the same as it: if it does not unite with it then it could not prove non-eternality. (This is an instance of *prāpti-sama* and *aprāpti-sama*).

Vādin—If your refutation unites with my proposition, then it would be an equal of it and so would not be able to refute my view; and even if it does not unite with it, it would not refute my view. Thus in refuting my view, you give up your own position.

* See refutation of Dharmakīrti's definition in NVTT., p. 693 and TR., p. 307.

Prativādin—If the *hetu* (reason) were to come first, and then the *pratijñā* (proposition), then in the absence of the *pratijñā*, whose *hetu* could it be ? And if the *pratijñā* were to come first and then the *hetu*, then the *pratijñā* being established, the *hetu* would become superfluous. Thus the *hetu* would become *asiddha* (unreal).

(This is an instance of *ahetusama*.)

Vādin—Similarly if your refutation were to precede, and my proposition (*pratijñā*) to come after, then in the absence of my view, what could you refute ? On the other hand if my *pratijñā* were to precede and your refutation to come after, then my *pratijñā* being established, your refutation would become useless. It may be urged that in order to refute your refutation I first approve of it and accept it. But this is not correct, because I do not refute your refutation, so my refutation is not based on yours; I only show the contradiction that is inherent in your own argument.[64]

Thus *svārtha-viruddha-khaṇḍana* consists in putting forward a refutation which can apply with equal force to one's own argument.

It can be seen from the above that the *Tarka-śāstra* recognises sixteen kinds of *jātis*, amalgamating the *prāpti-sama* and the *aprāpti-sama* of the *Nyāya-sūtra* into one, viz. *prāptyaprāptikhaṇḍana*. Further the *saṁśaya-khaṇḍana* of the *Tarka-śāstra* corresponds to *kārya-sama* of the *Nyāya-sūtra*. *Anukti-khaṇḍana*, *kārya-bheda-khaṇḍana* and *svārthaviruddha-khaṇḍana* are three kinds of *jātis* not found in the *Nyāya-sūtra*.

Tarka-śāstra's classification of *jāti* or *doṣopeta-khaṇḍana* into three divisions viz. *viparīta-khaṇḍana*, *asat* or *abhūta-khaṇḍana* and *viruddha-khaṇḍana*, was accepted by *Vādavidhi* (also ascribed to Vasubandhu), but it was not accepted by Diṅnāga (5th cent.) in his *Nyāyamukha* or his *Pramāṇa-samuccaya*.[65] Vasubandhu (4th cent.) reduced the number of the different types of *jātis*, and though Diṅnāga has not dropped

the topic of *jāti* altogether, he has made a further reduction of the types to fourteen (– based on *sādharmya, vaidharmya, vikalpa, aviśeṣa, prāptyaprāpti, ahetu, upalabdhi, saṁśaya, anukti, prasaṅga, arthāpatti, anutpatti, nitya, svārthaviruddha*). Diṅnāga does not seem to attach much importance to *jāti* as a distinct topic of study. He says that there can be an infinite number of such *dūṣaṇābhāsas* (wrong refutations having the semblance of refutations). They are wrong syllogisms and are nothing but logical fallacies, of which an exhaustive system has been established by Diṅnāga in his *Hetucakraḍamaru* and other works.

Diṅnāga says, " Refutation consists in showing that the formulation of a syllogism is defective (*nyūna, etc.*). The fallacies of refutation are called *jātis*." (*Kārikā* xix)[66]

"The *jātis* such as 'balancing the homogeneity' (*sādharmya*) etc. are called fallacies of refutation, since these (kinds of counter-syllogism) are generally imagined against a valid inference in order to bewilder the mind of the opponent, but they cannot show that the previous thesis has not been exactly formulated". They are called *jāti* because they refute without following the rules of logic and because being falsely imagined as a (real) refutation, they (have the appearance of being) analogous to that. If such a kind of argument is imagined in order to refute an inference, which has been established without respecting the rules of logic, then the cases are two: either the opponent does not notice the mistake of the inference (in which case there would be the ground of defeat called *paryanuyojyopekṣaṇa*) or he shows the process of that mistake (which would be a case of *dūṣaṇa*)"[67]

"*Jātis* such as those (already enunciated) and which have been expounded by *Akṣapāda* are said to have in general the nature of fallacies of the refutation, since they are commonly accepted as such (*suprasiddha*). The *jātis* that are expounded by other systems (*śāstras*) must also be stated in the same way, since the formulation of these (*jātis*) differs only a little from that of the others already referred to. An infinite variety of *jātis* can be established; therefore, I do not enunciate them all."[68]

Dharmakīrti (625 A.D.) also says, in his *Nyāyabindu* that refutation (*dūṣaṇa*) consists in indicating deficiency (*nyūnatā*) and other fallacies in an argument. Refutation signifies the exposing of fallacies, the fallacies consisting in the failure to prove something. Refutation hampers the establishment of the doctrines advanced by the opponent. *Jātis* have the semblance of refutation. (*Dūṣaṇam nyunatādyuktiḥ; ye pūrvaṁ nyunatādayaḥ sādhanadoṣā uktās teṣām udbhāvanaṁ dūṣuṇaṁ; tena pareṣṭārthasiddhi-pratibandhāt. dūṣaṇābhāsās tu jātayaḥ.* —NyB. III, 139–140). The word *jāti* expresses similarity. *Jātyuttaras* (counterfeit or sophistical answers or rejoinders) resemble answers (*uttara*) because they are stated in the place of correct answers. *Jātyuttaras* are exposures of non-existing or wrong fallacies (*anudbhūtadosodbhāvanāni jāty-uttarāṇīti*—NyB. III. 141).[69] These fallacies may be fallacies of the formulation of the argument (*sādhanadoṣa*), or of the probans (*hetu*) or subject (*pakṣa*) or example (*dṛṣṭānta*). A true refutation exposes such fallacies and convinces the judges of their being fallacies. *Dūṣaṇābhāsa* on the other hand is exposure of a non-existing or wrong fallacy, and so cannot demolish the view of the other party.[70]

The Jaina logicians mostly define *jāti* as '*mithyottaram*', a wrong answer. The Jaina logicians prefer this definition to that given by the *Nyāya-sūtra* 1.2.18 (*sādharmya-vaidharmyābhyāṁ pratyavasthānaṁ jātiḥ*), because this latter definition can also apply to opposition based on *sādharmya* and *vaidharmya*, even when the original argument of the *vādin* is a fallacious or invalid one. What harm could there be if it does? Why, Uddyotakara himself has said that *jāti* should not be employed by way of opposition to an invalid argument. For, under such circumstances, is the *prativādin* who employs a *jāti* aware of the fallacy in the *vādin's* argument or is he not? If he is, then he should have exposed that fallacy and not resorted to *jāti* by way of opposition. Even if the *vādin* declares after listening to the *jāti* that there was a flaw in his argument which the *prativādin* did not expose and instead

employed a *jāti*, yet the *prativādin* employing the *jāti* has no chance of victory, only the ignorance of both parties is disclosed If the opponent employs a *jāti* without being aware of the fallacy really present in the *vādin*'s argument, the employment of the *jāti* serves no purpose. Hence the definition as given by Akalaṅka, viz., '*mithyottaraṁ jātiḥ*' is better as there is no such difficulty involved.[71] Thus in the view of the Jaina logicians, *jātis* can in no way determine victory or defeat as the *Naiyāyikas* believe, because they are false answers which are inconsequential.

Akalaṅka has given the following illustrations of *jāti* as put forth by rival schools against the Jaina doctrine of Non-absolutism (*Anekāntavāda*) : (*a*) If as the Jainas say there is difference-cum-non-difference (*bhedābheda*) between things by their very nature, then when a man is invited to partake of curds, does he rush towards a camel, curds and camel being non-different i.e. one? (*b*) The Sugata is said to have been, many a time, born as one animal or the other; and an animal as the Sugata. Yet why is it that the Sugata is accepted as worthy of honour whereas an animal is regarded as fit to be devoured ?[72]

The Jaina logicians, like the Buddhist ones, say that there is no limit to such cases of opposition by counterfeit rejoinders (*jāti*)[73] and so it is not possible to fix or determine their number. Yet they have no objection to Akṣapāda's classification into twenty-four types as it is quite comprehensive and other types can be included in these. It is rightly remarked that the solution of all types of *jāti* lies in the examination of the probans (*hetu*) as to whether it has the characteristic, viz. *anyathānupapannatva*, 'not being otherwise possible' or 'incompatibility with the opposite', that to say, whether it is invariably concomitant with the probandum. Such attempts at throwing dust in the eyes, as *jāti*, etc. cannot be successful if the probans in the original argument possesses the unmistakable character of a sound probans. When however the opponent (*prativādin*) employs a *jāti*, the *vādin* on his part

should formulate a sound answer and never take his stand on other *jātis* by way of opposition as this would not lead to any conclusion and would be incompatible with the canons of genuine dialectic.[74]

It may be noted in passing that Hemacandra's explanation of the word '*jāti*' and exposition of *jāti* are almost verbatim the same as those of Dharmottara in his *Nyāya-binduṭīkā*, III. 139-ff. (*Sādhanadoṣodbhāvanaṁ dūṣaṇam. abhūtadoṣodbhāvanāni dūṣaṇābhāsā jātyuttarāṇi*.-PM.II.1.28-29). Hemacandra says that they are rejoinders by similarity with correct rejoinders, and are as it were reflections of true arguments and are employed in opposition to a valid or fallacious probans advanced by the *vādin* when the true nature of the defect is not realised at once (or, we might add, when the *prativādin* cannot find a sound argument to save his position).[75] It can be seen that with regard to the topic of *jātis*, Hemacandra seems to be influenced more by the *Naiyāyikas* than by any of the *Jaina* logicians before him.

Summing up, we may say that *jāti* is a sophistical refutation or counterfeit rejoinder which being logically unsound is incapable of refuting the other party's argument. Such rejoinders are mostly based on *sādharmya* and *vaidharmya*, but as we have seen there are some types of *jāti* in which these can be said to be present only distantly or not at all. The common characteristic of all *jātis* is that they lose sight of *vyāpti* (invariable concomitance between the probans and the probandum) which is the very corner-stone of inference in Indian logic. We can guess that the section on *jāti* in early works on logic is a collection and classification of sophistical refutations actually advanced by debaters The restricted scope of some *jātis*, e.g. *aviśeṣasama*, *nityasama*, etc. as defined in the *Nyāya-sūtra* may be regarded as supporting our surmise. They indicate an immature stage of logical reasoning in its formal accept. Their scope was widened by the later logicians, especially by Udayanācārya. In their own times such arguments might not have failed to convince, or might

have even passed as sound or forceful arguments, or might have served to bewilder the other party.[9] But on being properly examined and checked they were found to be defective, and it is quite likely that in trying to specifically detect the flaw in such a *jāti*-argument—whether it pertained to the *hetu* (probans) or the *pakṣa* (subject) or the *dṛṣṭānta* (example) or in general to the deficiency in respect of *vyāpti* or the relation between the *hetu* (probans) and the *sādhya* (probandum)—the requirements of valid reasoning came to be determined and formulated. It might have been thus that the formulation of the *vpāpti* (the rule of invariable concomitance), the kinds of logical fallacies, the characteristics of a valid *hetu* or *pakṣa* or *dṛṣṭānta*, the laws of thought and the essential and the inessential elements of reasoning came to be determined and ascertained. The section on *jāti* indicates that *vyāpti* was regarded from very early times as indispensable, rather as the very basis of inference in Indian logic, it being checked and verified by means of the *dṛṣṭānta* (example) having the same properties (*sādharmyeṇa*) or having contrary properties (*vaidharmyeṇa*).

The logicians generally do not approve of the employment of *jāti*; for being logically unsound, *jātis* cannot as a matter of fact refute the thesis of the other party, and in no case should one answer a *jāti* with a *jāti* as then the debate would lose all its charm and dignity. Still the topic of *jāti* is treated in works on Indian logic so that being fully acquainted with their character, people might avoid the use of *jātis* (sophistical refutations) or detect them if employed by others. Some logicians even do not object to the use of *jāti* in exceptional circumstances. As Vācaspati says, when a man upholding the authority of the Veda is met with arguments against its authority and on the spur of the moment he does not find proper answers to these, he may state what is really a *jāti* if he feels that by doing so he would be able to stop the infectious tendency to challenge the authority of the Veda from spreading among kings and the people at

large. One who thus puts forward a *jāti* knowingly just takes a chance in case the other party is not able to find the right answer or detect the flaw in his argument; his idea is that rather than be totally defeated it is better that the issue be rendered doubtful. But in other cases a *jāti* is urged unknowingly, especially when the debate or discussion is a subtle and long one, when one passes from one point to another and seeks to find analogies to prove one's position.[76]

NOTES

1 Vacana-vighāto yaḥ kriyate sāmānya-śabdasya viśeṣāneka-sambandhitve sati avivakṣitādhyāropeṇa chalaṁ tad veditavyam.—NV. p. 176,

2 See also TR., pp. 240-246.

3 Note that only the *Upāyahṛdaya* gives four different meanings of '*nava*'— *navaḥ, nava, na vaḥ, navaḥ*—yathā kaścid āha—yo mayā parihitaḥ sa nava-kambalaḥ. atra dūṣaṇaṁ (vadet) yad bhavatā parihitaṁ tad ekam eva vastraṁ kathaṁ naveti. atra prativaden mayā nava ity uktaṁ tathā ca navaḥ kambalaḥ na tu naveti. atra dūṣayet kathaṁ nava? nava-lomair nirmitatvān nava ity ukte prativādī vadet tattvato'parimitāni lomāni kathaṁ nava lomānīty ucyate. atrāha. nava it mayā pūrvam uktam na tu nava-saṁkhyā. atra dūṣaṇam. tad vastram yuṣmākam eveti jñātaṁ kasmād etan na vaḥ kathyate. atrottaraṁ. mayā nava ity uktam kintu na va iti noktam. atra dūṣaṇam. bhavataḥ kāyaṁ kambalo vaste iti pratyakṣam etat. katham ucyate navaḥ kambalaḥ. ayaṁ hetvābhasa ity ucyate vāk-chalaṁ ca.—UH., pp. 14–15 (*Pre-Diṅnāga Buddhist Texts on Logic from Chinese Sources*—G. Tucci, GOS).

4 See NB., 1.2.12; and NVTT., p. 350

5 Tasya pratyavasthānam-jñātvā'jñātvā va prayogāt pratiṣedhānupapattiḥ, yadi tāvan navakambalasyārthaṁ buddhvā nāyaṁ nava-kambala iti pratyavatiṣṭhate tadārthāntaram āha. anyad budhyate'nyat pratiṣidhyate iti. atha punar naiva navakambalasyārthaṁ budhyate tathāpy ajñānam iti.—NV., p. 177.

6 Yad vivakṣitam artham āpnoti cātyeti ca tad atisāmānyaṁ yathā brāhmaṇatvaṁ vidyācaraṇasampadaṁ kvacid āpnoti kvacid atyeti. sāmānya-nimittaṁ chalaṁ sāmānyacchalam iti.—NB. 1.2.13.

7 Asya ca pratyavasthānam--avivakṣitahetukasya viṣayānuvādaḥ, praśaṁsārthatvād vākyasya. tad atrāsambhūtārtha-kalpanānupapattiḥ. yathā sambhavanty asmin kṣetre śālaya iti anirākṛtam avivakṣitaṁ ca bījajanma, pravṛtti-viṣayas tu kṣetram praśasyate. so'yaṁ kṣetrānuvādonāsmin śālayo vidhīyanta iti. bījāt tu śālinirvṛttiḥ satī na vivakṣitā. evaṁ sambhavati brāhmaṇe vidyācaraṇa-sampad iti sampad-viṣayo brāhmaṇatvaṁ na sampaddhetuḥ. na cātra hetur vivakṣitaḥ viṣayānuvādas tv ayaṁ praśaṁsārthatvād vākyasya—sati brāhmaṇatve sampaddhetuḥ samarthaḥ iti. viṣayaṁ ca praśaṁsatā vākyena yathā hetutaḥ phalanirvṛttir na pratyākhyāyate. tad evaṁ sati vacana-vighāto'-sambhūtārtha-kalpanayā nopapadyata iti.—Ibid.

8 This *sūtra* has been interpreted differently by the *Nyāya-vārttika* and the *Nyāya-sūtra-vivaraṇa*. But this does not make any difference ultimately, so it is not necessary to give these interpretations here.

9 See NV., 1.2.14.

10 Atra samādhiḥ-prasiddhāprasiddhe prayoge vaktur yathābhiprāyaṁ śabdārthayor abhyanujñā pratiṣedho vā nacchandataḥ. pradhānabhūtasya śabdasya bhāktasya ca guṇabhūtasya prayoga ubhayor lokasiddhaḥ. siddhe prayoge yathā vaktur abhiprāyas tathā śabdārthāv anujñeyau pratiṣedhyau vā nacchandataḥ. yadi vaktā pradhāna-śabdaṁ prayuṅkte yathābhūtasyābhyanujñā pratiṣedho vā nacchandataḥ. atha guṇabhūtaṁ tadā guṇabhūtasya. yatra tu vaktā guṇabhūtaṁ śabdaṁ prayuṅkte pradhānabhūtam abhipretya paraḥ pratiṣedhati, svamanīṣayā pratiṣedho'sau bhavati na paropālambhaḥ.—NB.. 1.2.14.

11 NVTT., 1.2.16 (p. 535).

12 Vāk-chalam evopacāracchalam tadaviśeṣāt. na, tadarthāntarabhāvāt. aviśeṣe vā kiñcit sādharmyād ekacchala-prasaṅgaḥ. NS. 1.2.15-17.

13 See PKM, pp. 649-651; TŚlv, pp. 294-297; SV., *Ṭīkā*, p. 315; PM., *Svopajña-vṛtti*, II. 1.29, p. 62.

14 Sa dūṣaṇāparisphūrtau vijigīṣayā'sya prayogo buddhi-pūrvakaḥ. kvacit tātparyabhramād asya pātaḥ. prathama-kakṣāyāṁ na sambhavati. dvitīya-kakṣāsu asya sambhavaḥ. tṛtīya-kakṣāsūdbhāvanam. paratātparya-viṣaye śabda-tātparyasaṁcāreṇa dūsaṇa-vacanaṁ chalam iti sāmānya-lakṣaṇam. vādinā'nyathābhiprāya-pūrvakaṁ vādyantareṇa dūṣaṇābhidhānaṁ vā kalpitadūṣya-dūṣaṇaṁ chalam ity ācāryāḥ. tat trividhaṁ—vāk-chalam, sāmānyacchalam, upacāracchalaṁ ca. tatra mukhyārthā'tātparyeṇa prayukte mukhyārtha-saṁcāreṇābhidhānaṁ vāk-chalaṁ. tad api trividhaṁ—dharmipada-saṁcārāt dharma-pada saṁcārād ubhayapada-saṁcārāc ca. tad api pratijñā-hetu dṛṣṭāntabhedān navavidham.......

Vivakṣitavākyārthe tātparyasaṁcārād dūṣaṇābhidhānaṁ sāmānya-cchalaṁ. tac ca pada-vākya-tātparya-saṁcārād dvividham api pratyekaṁ ṣaḍvidham. tad yathā. sambhave niyama-tātparya-saṁcāraḥ—ayaṁ sambhāvita-vidyaḥ brāhmaṇatvād ity ukte, brāhmaṇatvaṁ na vidyāvattva-niyataṁ vrātye vyabhicārāt. niyame sambhavaḥ—'yo dhūmavān sa vahnimān' ity ukte, sambhavati dhūmavati vahnir na tv etāvatā dhūmād vahni-siddhir api. uddeśye vidheyatva-saṁcāraḥ—śabdo'nitya iti śabdam uddiśyā'nityatve vidheye na hi yo' nityaḥ sa sarvaḥ śabdaḥ, ghaṭāder anityasyā' pi aśabdatvād ity aṁśabādhaḥ. vidheye uddheśyatva-saṁcāro yathā—anityaṁ kāryam anityatvād ity ukte kāryatvaṁ yad vidheyam tatroddeśyatva-saṁcārāt sādhyaviśiṣṭatvābhidhānam. viśeṣaṇe viśeṣyatva-saṁcārād yathā—'dvija-śataṁ bhojitam' ity acetanāyāḥ śata-saṁkhyāyā bhojitvāsambhava iti. viśeṣaṇāntare viśeṣaṇāntara-saṁcāro yathā—śataṁ dvijātayo bhojitāḥ iti. Sanakādayo bhojitāḥ na dvijātayaḥ ity atra viśeṣye viśeṣaṇāntara-saṁcārād api saptamī vidhā saṁbhavati, tathā'pi viśeṣaṇe viśeṣya-saṁcārasyā''-kṛtigaṇatvena tat-saṅgrahaḥ.

Upacāra-vṛttyā prayukte mukhya-tātparyakatayā dūṣaṇam upacāra-cchalam. mañcāḥ krośantīty ukte mañcasyā'cetanasya krośana-kartṛtvam anupapannam iti. kathāyāṁ lakṣaṇāyāḥ kathaṁ prayoga iti cet, na, laukika-lakṣaṇāyā mukhya-tulyatvāt, asyā'pi pratijñā-hetu-dṛṣṭāntāśrayatayā nava vidhāḥ....

Tad eteṣu chala-prabhedeṣu pratyuttaram evam ūhanīyam. nava-kambalatvād iti nūtana-kambalatvaṁ vivakṣitaṁ, na tu nava-saṁkhyā-yogikambalatvam ity asiddhyudbhāvane niranuyojyānuyogaṁ te nigraha-sthānam iti; dūṣaṇeṣv apy evaṁ chalam ūhanīyam iti.—VV., pp. 20–21.

15 See PP., pp. 59, 51.

16 Prayukte hi hetau yaḥ prasaṅgo jāyate sa jātiḥ. sa ca prasaṅgaḥ sādharmya-vaidharmyābhyāṁ pratyavasthānaṁ upālambhaḥ pratiṣedha iti. 'udāharaṇa-sādharmyāt sādhya-sādhanaṁ hetur' ity asyodāharaṇa-vaidharmyeṇa pratyavasthānam. 'udāharaṇa-vaidharmyāt sādhya-sādhanaṁ hetur' ity asyodāharaṇa-sādharmyeṇa pratyavasthānam. pratyanīkabhāvāj jāyamāno'rtho jātiḥ.—NB., 1.2.18.

17 Sūtrārthas tu yathāśruti na punar udāharaṇa-sādharmyeṇa udāharaṇa-vaidharmyeṇa veti. kimartham idam ucyate ? vyāpakārtham—yadi yathāśruti sūtrārtho bhavati tadā sarva-jātayo vyāpyante yena kenacit sādharmyaṁ yena kenacit vaidharmyam iti. lakṣaṇe jātīnām avyāpaka-tvaṁ tu doṣaḥ. Bhāṣye udāharaṇa-sādharmyam udāharaṇa-vaidhar-myaṁ codāharaṇārtham iti yathā codāharaṇena evam anudāharaṇenā'-pīti.—NV., p. 179.

18 Sādharmya-vaidharmyābhyām iti sāvadhāraṇo nirdeśas tena vyāpti-nirapekṣābhyāṁ sādharmya-vaidharmyābhyām iti sāvadhāraṇo nirdeśas tena vyāpti-nirapekṣābhyām sādharmya-vaidharmyābhyāṁ pratyavasthānaṁ dūṣaṇābhidhānaṁ jātir ity arthaḥ. yady apy ubhābhyāṁ pratyavasthānasya pratyeka-pratyavasthāne'vyāptir eka-pratyavasthānasya lakṣaṇatve parapratyavasthāne'vyāptiḥ. na vā'nyatara-pratyavasthānaṁ niyataṁ, sarvatra jātāv abhāvāt tathāpi vyāpti-nirapekṣatayā dūṣaṇābhidhānam ity eva vācyam tena ca sandarbheṇa dūsaṇasamarthatvaṁ svavyāghātakatvaṁ vā darśitam. tathā cacchalādibhinna-dūṣaṇāsamartham uttaraṁ svavyāghātakam uttaraṁ vā jātir iti sūcitam. sādharmyasamādi-caturviṁśatyanyānyatvaṁ tadartha ity api vadanti.—NSV., 1.2.18. See also *Nyāyasūtra-vivaraṇa*, 1.12.18.

19 Sādharmyeṇa pratyavasthānam aviśiṣyamāṇaṁ sthāpanā-hetutaḥ sādharmya-samaḥ. aviśeṣaṁ tatra tatrodāhariṣyāmaḥ. evaṁ vaidharmya-sama-prabhṛtayo'pi nirvaktavyāḥ.—NB., 5.1.1.

20 Samīkaraṇārthaṁ prayogaḥ samaḥ sādharmyam eva samaṁ vaidharmyam eva,samam iti samārthaḥ samīkaraṇārthaḥ prayogo draṣṭavyaḥ. samīkriyatāṁ parapakṣo mā vā'kāri, ayaṁ tu samīkaraṇārthaṁ pravartate. yathā loke kuṭumbārthaṁ ghaṭata iti viśeṣa-hetvabhāvo vā samārthaḥ na bhavatā viśeṣahetuḥ kaścid apadiśyata iti. enam artham urarīkṛtya pravartate yathābhūtaṁ bhavataḥ sādhanaṁ tathābhūtaṁ mamāpīti. ....na ca vādi-prativādinos tulyatā samārthaḥ jāter asaduttaratvāt—niyamenaiva jātivādī asadvādī bhavati vādināṁ tu sadasadvāditve aniyama iti.—NV., pp. 530-531.

21 Anye tu vaktṛdharmaṁ vacana upacaranti. jātivādī hi samaḥ sādhāraṇo notkṛṣṭo'pakṛṣṭa ity arthaḥ. sa ca sādharmyādyuttaradvāraivonnīyata iti uttaram eva samam; apakṛṣṭam uttaraṁ dvedhā bhavati dūṣaṇasamartham apy asiddhaṁ, siddham api dūsaṇāsamartham. prathamam api kalpita-dūṣyaṁ yat tac chalam uktam akalpita-dūṣyaṁ tu kevalaniranuyojyā-nuyogo vakṣyate, śeṣaṁ jātir ity anena sāmānya-lakṣaṇaṁ sūcitaṁ bhavati. tathā ca Vārttikam—jātir nāma sthāpanāhetau prayukte yaḥ pratiṣedhāsamartho hetuḥ iti. vayaṁ tu brūmaḥ, tat trayaṁ, caturthaś cāyam arthaḥ yaj jātyuttaraṁ parasādhanam iva svātmānam api vyāpnotīty ataḥ sva-para-sāmyāt samam ity ucyate. tathā ca svātma-vyāghātakatvaṁ nāma sarva-sādhāraṇa-duṣṭatva-mūlam asya sūcitaṁ bhavati,—BS., pp. 5-7. See BS., pp. 4-7.

22 See NVTT., p. 673.

23 Pratyekaṁ tridhā caite jātī; sad-viṣaye, asad-viṣaye, asaduktike ca. tatrādyodāharaṇaṁ Vārttike. dvitīyodāharaṇaṁ tu nityaḥ śabdaḥ sparśa-śūnyatvād ākāśavad ity upasaṁhāre, naitad evam, asti hy anityenā'pi

sādharmyaṁ prameyatvaṁ, tataḥ kiṁ nānityo ghaṭavat. na ced evaṁ, nityo'pi na syāt, aviśeṣāt; yad vā, asty ākāśenaiva vaidharmyam apy asmadādi-bāhyakaraṇa-grāhyatvaṁ, tataḥ kiṁ nānityo ghaṭavat. na ced evam, nityo'pi na syāt, aviśeṣāt. tṛtīyodāharaṇaṁ Bhāṣye-'uktimātram atra duṣṭaṁ nārtha' iti pradarśanārthaṁ Vārttika-tātparyam upekṣoktā Tātparyācāryaiḥ, 'saduttaram apy uktidoṣeṇaiva jātir' ity asyārthasya prati-dṛṣṭānta-prakaraṇasamādau svayam eva sphuṭīkaraṇāt.—BS., pp. 9-10.

24 Avidyamānadharmādhyāropa utkarṣah, vidyamāna-dharmopacayo'-pakarṣah, varṇyah sādhyaḥ, avarṇyaḥ asādhyaḥ, vikalpo viśeṣah eteṣāṁ dharmāṇām udbhāvanārthāḥ prayogā utkarṣa-samādayo jātayaḥ. sādhya-sādhana-dharmayos tulyatayā pratyavasthānaṁ sādhyasamety ucyate. —NV., pp. 532-533.

25 See BS., p. 19-20.

26 Sādhanadharmayukte dṛṣṭānte dharmāntara-vikalpāt sādhyadharma-vikalpaṁ prasajato vikalpasamaḥ.—NB., 5.1.4.

27 Hetvādyavayavasāmarthyayogī dharmaḥ sādhyaḥ taṁ dṛṣṭānte prasajataḥ sādhyasamaḥ.—NB., 5.1.4.

28 Asat sādhyate na tu sat. prāptaṁ ca sat. asataḥ prāptyasambhavāt. tasmān na sādhyam. api ca yena yasya prāptis tena tasyaikyam eva; yathā gaṅgā sāgaraṁ prāptā sāgareṇa saṅgatā sāgareṇābhinnā tadvad evābhinne cet sādhya-sādhane nāsti sādhya-sādhana-bhāvaḥ tasya bhedādhiṣṭhānatvād ity api draṣṭavyam.—NVTT., p. 667.

29 Iyaṁ ca jātiḥ sarvahetvapavāda-dvārikā yadi jñāpako hetur apadiśyate tathāpi, yadi kārakas tathāpī'ti. sā ceyaṁ kārya-kāraṇatvāpavāda-dvāreṇa pravartamānā vyāhatā bhavati. ko vyāghātaḥ, uttarasyānutthānam. katham iti. yad idam uttaraṁ prāpyā'rthaṁ kāraṇatvāpavādadvāreṇa sādhayed aprāpya veti tasyāpi pratiṣedhyaṁ prāpya vā'prāpya veti samo doṣaḥ—NV., p. 536.

30 Sādhyasamo hi dṛṣṭānte sādhyavaddhetvādyavayavaṁ prasañjayati. pañcā-vayava-prayogasādhyatāṁ dṛṣṭāntagatasyā'nityatvasya prasañjayatīty arthaḥ. prasaṅga-samas tu dṛṣṭāntagatasyā'nityatvasya pramāṇamātra-sādhyatām ity apaunaruktyam.—NVTT., p. 678.

31 Utpannaḥ khalu ayaṁ śabda iti bhavati. prāg utpatteḥ śabda eva nāsti. utpannasya śabdabhāvāc chabdasya sataḥ prayatnānantarīyakatvam anityatva-kāraṇam upapadyate. kāraṇopapatter ayukto'yaṁ doṣaḥ—prāg utpatteḥ kāraṇābhāvād iti.—NB., 5.1.13.

32 Yathā'nutpannās tantavo na paṭasya kāraṇaṁ tathā śabdotpatteḥ prāg anutpannaṁ prayatnānantarīyakatvaṁ nānityatvasya kāraṇam iti sādharmyeṇa pratyavasthānam ity asty sāmānya-lakṣaṇam ity arthaḥ. etāvatā cārthāpattisamāyā anutpatti-samāto bhedo darśitaḥ ihānutpannair ahetubhiḥ sāmyena kārya-pratiṣedhāt arthāpattisamāyāṁ vakyārtha-viparītāropeṇa pratiṣedhād iti.—NVTT., p. 680. See also NV., p.539.

33 Yat tu khalūktam asati sādhye kasya sādhanam iti? yat tu nirvartyate yac ca vijñāpyate tasyeti.—NB., 5.1.19.

34 Kaḥ punar asyāḥ prāptyaprāpti-samābhyāṁ bhedaḥ sādhya-sādhanabhāva-pratiṣedhasyobhayatrāpi tulyatvād iti cet, tatra svarūpataḥ sannikarṣā-sannikarṣacintā, iha tu kāraṇataḥ (kālataḥ?); te arthadvārike, iyaṁ śabda-dvārikā, te hi [dvi ?]vikalpopakrame, iyaṁ trivikalpopakramā tatra sahakāriśaktir dūṣyā iha svarūpaśaktiḥ, te viśeṣaṇāsiddhi-deśanā-bhāse, iyaṁ pratikūlatarkadeśanābhāseti.—BS., pp. 41-42.

35 Anye tv idaṁ sūtram anyathā vyācakṣate. tathā hy ekadharmopapatteḥ sādhana-dharmasya prayojakatvād aviśeṣe sādhya-dharmavattā-lakṣaṇe pakṣadṛṣṭāntayoḥ sarvāviśeṣaḥ sarva-prakāreṇāviśeṣaḥ prasajyeta sadbhāvopapatter iti, sāhitya-sadbhāvopapatter iti.—BS., p. 47.

36 Upapattisamā prakaraṇasamāto na bhidyata iti tatrā'pi nityānitya-kāraṇopapattir ihā'pīti. na, nityānitya-kāraṇasyaikatropapatteḥ—nitya-kāraṇaṁ cā'nitya-kāraṇaṁ caikatropapadyata ity upapattisamaḥ nityā-nityapakṣābhyāṁ pratyavasthānāt prakaraṇasama iti bhedaḥ.—NV., 5.1.25 (p. 542).

37 See BS., p. 50 and Vardhamāna's *Prakāśa* on it.

38 See NV., 5.1.27.

39 See NB., 5.1.30; NVTT., p. 688.

40 Āvaraṇānupalabdhir nāsty anupalabdher iti yo'yaṁ hetur uktaḥ sa na hetuḥ anupalambhasvabhāvatvād anupalabdher upalambha-pratiṣedhā-rthakatvād ity arthaḥ, astitva-nāstitve hi bhāvānam upalambhānupa-lambhābhyām avasthāpyete; yad upalabhyate tad asti śaśavad, yan nopalabhyate tan nāsti tad-viṣāṇavat, nopalabhyate ca śabdasyāvaraṇam mūlodakāder iva mṛttiikety anupalambhān nāstīti gamyate, anupalambho hy ayam āvaraṇaviṣayo nānupalabdhi-viṣayaḥ sa āvaraṇasyaiva āvaraṇaṁ gamayati nānupalabdher ity anupalabdher bhāvād āvaraṇam eva nāstīti.—NM., II, p. 185. See also BS, p. 60.

41 See BS., p. 63.

42 Atrāpy anityaśabdena sarva eva viśesaṇadharmā upalakṣyante. 'nityam anityabhāvād' ity anena tadatadrūpatāvikalpaḥ. sa ca sārūpya-vairūpyābhyāṁ dvirūpaḥ. 'nityatvopapatter' ity anena vivakṣitānupapattimātram. tenāyam arthaḥ—vivakṣita-dharmasya tadatadrūpatā-vikalpānupapattyā dharmiṇas tadviśiṣṭatvakhaṇḍanaṁ nityasamā. iyaṁ ca saṁjñā dharmāntare sukha-duḥkhaśabdavad gauṇī.—BS., pp. 65-66.

43 See BS., pp. 66-68.

44 Atha niradhikaraṇo dharmaḥ kathaṁ syād iti tad ucyate anityatvaṁ hi nāma nirodhaḥ pradhvaṁsābhāva ity anarthāntaram anityatvād abhāva iti tu vyavahāra-mātraṁ, sā ceyam anityatā śabdāvacchinnā na śabdādhikaraṇā; na khalu ghaṭābhāvo ghaṭāśrito bhavitum arhati—bhāvasvabhāvā hi dharmā dharmyāśritā bhavanti nābhāvāḥ, abhāvas tv āśrito'pi na pratiyogyāśrito bhavati kiṁ tu arthāntara-vṛttir bhū-pradeśa iva ghaṭābhāvaḥ.—NM., II, pp. 186-187.

45 See NB., and NV., 5.1.36.

46 Saṁśayasamāto na bhidyata iti cet, ubhayasādharmyāt saṁśaya-samaḥ, ayaṁ tu na tathā tasmād bhidyata iti. atha sādharmyasamāto na bhidyata iti cet, na, hetvadhyāropaṇāt. sādharmya-samā na hetvadhyāropeṇa pravartate iyaṁ tv anyathābhihite hetau anyathākāraṁ pravartate. —NV., p. 547.

47 See UH, pp. 26-27 (*Buddhist Texts on Logic*—Tucci—GOS).

48 Bhedābhedasamam. yathā''tmanityatāsthāpana ākāśa udāharaṇam. atra dūṣaṇaṁ. ātmā ākāśaś cābhinnau iti ced aikadharmyāt katham ākāśasyā''tmano dṛṣṭāntatā. bhinnau iti ced anyānyasādharmyāprāptiḥ. etad ucyate bhedābhedasamam.—UH., pp. 27-28.

49 Anyac ca ātmā nityo'naindriyakatvāt. yathākāśo'naindriyakatvān nitya iti bhavataḥ sthāpanā. atha yad anaindriyakaṁ tan nāvaśyaṁ nityaṁ tat kathaṁ siddham. etad ucyate praśnabāhulyam uttarālpatā ca.—UH., p. 28.

50 Anyac ca. ātmā nityo'naindriyakatvād iti bhavat-sthāpanā. anaindriyakasya dvaividhyam. yathā paramāṇavo' nupalabhyā anityāḥ. ākāśas tv indriyānupalabhyo nityaṁ ca. kathaṁ bhavatocyate yad anupalabhyatvān nitya ity ucyate praśnālpatottarabāhulyaṁ ca.—UH., p. 28.

51 Anyac ca. anupalabdhihetunā''tmā nitya iti bhavatā pratijñātam. ākāśaś cātmā ca bhinnau katham ubhayor anupalabhyatvaṁ hetur bhavet. iti hetusamam.—UH., p. 28.

52 Anyac ca. anupalabhyatvān nitya ākāśa iti bhavataḥ sthāpanā. ākāśaś ca sarvavyāpī tataś ca kiṁ sarvāṇi vastūny anupalabhyāni. etad vyāptisamam.—UH., p. 28.

53 Anyac ca. paramāṇur avyāpy anaindriyako'py anityaḥ. ātmā tv anaindriyakaḥ kathaṁ nityaḥ. iti avyāptisamam.—UH., p. 28.

54 Anyac ca. sarvam anityam. na tv ātmā sarvaṁ, tato nitya iti bhavat-pratijñā. ātmā ca tadbhāvād anitya iti vaktavyaḥ, kiñcid dagdho hi kambalaḥ prāyeṇādagdhatvād adagdha ity ucyate. etad viruddham.—UH., p. 29.

55 Anyac ca. ātmā'naindriyakatvād ākāśatulya iti bhavatsthāpanā. ākāśasyānupalabdhir ātmano'pi tathātvam. ātmana upalabdhir iti cet tadā''kāśo'pi sukha-duḥkhādikam upalabheta. ātmana ākāśasya cā'bhinnatvāt. etad aviruddham.—UH., p. 29.

56 Anyac ca. asty ātmā'naindriyakatvād ity bhavad-vacanam. atha vimarśaḥ kenāvaraṇenānupalabdhiḥ. kāraṇam atra vaktavyam. yadi kāraṇaṁ na vidyata ātmārthasya hāniḥ. ity asaṁśayasamam.—UH., p. 29.

57 Anyac ca. sūtreṣu ātmano'nupalabdhir uktā tasmāt tasya nityatā jñātā iti bhavataḥ sthāpanā. paraṁ tu nāsty ātmā nāsty ātmīyam ity api sūtreṣūktaṁ. nirgrantha-dharme cātmānityatoktā. ātmānityatve niyate sati sūtrāṇāṁ vaiṣamyānupapattiḥ. iti śrutisamam.—UH., p. 30.

58 Anyac ca. yadi bhavatā ekam eva sūtram adhigacchatā''tmā nitya iti manyate, athā'nyeṣām api sūtrāṇām pratītir ātmā'nityo mantavyaḥ. ubhayathā pratītir iti ced ekasyaivātmano nityatvānityatvaprasaṅgaḥ. iti śrutibhinnam.—UH., p. 30.

59 See TŚ., p. 12.

60 Anukti-khaṇḍanam. pūrvam anuktatvād anityatā'bhāva etad anukti-khaṇḍanam. pratijñā pūrvavat. prativādī prāha. prayatna iti vacanaṁ śabdasyānityatāhetur iti cet tadā kiṁ prāpyate? prayatna ity anukte tadā śabdo nityaḥ. etad eva prāpyate. pūrvakāle 'nitye sati katham adhunā nityaḥ syāt. viparītam etat khaṇḍanam. kasmāt. asmābhiḥ sthāpito hetur abhivyaktyartho notpattyartho na vā vināśārthaḥ. yady asmat-sthāpitasya hetor vināśaḥ syāt tadā bhavat-khaṇḍanaṁ viśiṣyeta. yadā hetur mayā'nuktas tadā śabdasyānityatā'nabhivyakteti ced bhavat-khaṇḍanam. etat khaṇḍanābhāsa eva. yadi vināśahetunā māṁ khaṇḍayati bhavān tadviparīta-khaṇḍanaṁ syāt.—TŚ., p. 23.

61 Kāryabheda-khaṇḍanam—kāryabhedāt ghaṭavac chabda iti na vaktavyam, etat kāryabhedakhaṇḍanam ucyate. anityaḥ śabdaḥ kṛtakatvād ghaṭavad iti sthāpite prativādī prāha ghaṭa-śabdayoḥ kāryabhedaḥ kāryabhedāt tulyā'nityatānupapattiḥ...TŚ., p. 23.

62 See TŚ., p. 24.

63 See TŚ., p. 25.

64 See TŚ., p. 29–30.

65 See *Buddhist Logic before Diṅnāga* (*Asaṅga, Vasubandhu, Tarkaśāstras*) - G. Tucci (*Journal of the Royal Asiatic Society,* July, 1929). Tucci's article is very illuminating, especially because he has first-hand knowledge of Chinese and Tibetan sources. Tucci is of the view that the *Tarka-śāstra* is anterior to Diṅnaga and that this *Tarkaśāstra* or a redaction of it was existent already in the time of Vātsyāyana or even the final redactor of the *Nyāya-sūtra*. Vasubandhu's list of *jātis* is analogous to that of the *Tarkaśāstra* as can be seen from quotations in the *Pramāṇa-samuccaya-vṛtti* of Diṅnāga. Vasubandhu did not recognise the *prati-dṛṣṭānta* and *svārtha-viruddha* varieties of *jāti*.

66 *Nyāya'nukha* of Diṅnāga, Translation, p. 53—Tucci (Heidelberg, 1930).

67 *Nyāyamukha* (Translation, p. 54).

68 *Nyāyamukha* (Translation, p. 71).

69 Jāti-śabdaḥ sādṛśyavacanaḥ uttara-sadṛśāni jātyuttarāṇiti. uttarasthāna-prayuktatvād uttarasadṛśāni jātyuttarāṇi. abhūtasyā'satyasya doṣasyod-bhāvanāni. udbhāvyata etair ity udbhāvanāni vacanāni tāni jātyuttarāṇi. jātyā sādṛśyenottarāṇi jātyuttarāṇiti.—*Nyāyabinduṭīkā*, III. 140–141.

70 Sādhanadoṣodbhāvanāni dūṣaṇāni. sādhana-doṣo nyūnatvam. pakṣadoṣaḥ pratyakṣādiviruddhatvam. hetudoṣo'siddhānaikantikaviruddhatvam. dṛṣṭānta-doṣaḥ sādhanadharmādyasiddhatvam. tasyodbhāvanaṁ prāśnika-pratyāyanaṁ dūṣaṇam. abhūta-sādhanadoṣodbhāvanāni dūṣaṇābhāsāni. sampūrṇe sādhane nyūnatva-vacanam, aduṣṭapakṣe pakṣadoṣavacanaṁ, siddhahetuke' siddha-hetukaṁ vacanam. ekāntahetuke' nekāntahetukaṁ vacanam. aviruddha-hetuke viruddha-hetukaṁ vacanam. aduṣṭadṛṣṭānte duṣṭadṛṣṭāntadoṣavacanam. etāni dūṣaṇābhāsāni. na hy ebhiḥ parapakṣo dūṣyate. niravadyatvāt tasya.—*Nyāyapraveśa*, p. 8 (GOS, 1930). (This work was ascribed to Diṅnāga, but now scholars believe it to be a work of Śaṅkarasvāmin, a pupil of Diṅnāga. See *Nyāyapraveśa*, Introduction—A. B. Dhruva).

71 evaṁ bhedena nirdiṣṭā jātayo....
ye caturviṁśatir anyānantā bodhyās tathā budhaiḥ. 446
naitābhir nigraho vāde satyasādhanavādinaḥ;
sādhanābhaṁ bruvāṇas tu tata eva nigṛhyate. 447
nigrahāya prakalpyante tv etā jalpa-vitaṇḍayoḥ,
jigīṣayā pravṛttānām iti yaugāḥ pracakṣate. 448
tatredaṁ durghaṭaṁ tāvaj jāteḥ sāmānya-lakṣaṇam.
sādharmyeṇetareṇāpi pratyavasthānam īritam. 449
sādhanābhaprayoge'pi tajjātitva-prasaṅgataḥ;
dūṣaṇābhāsarūpasya jātitvena prakīrtane. 450
astu mithyottaraṁ jātir Akalaṅkokta-lakṣaṇā.—
TŚlv, p. 309. See Ibid, pp. 309-310; also PKM., pp. 651-663.

72 Tatra mithyottaraṁ jātiḥ yathā'nekānta-vidviṣām. 371
dadhyuṣṭrāder abhedatva-prasaṅgād ekacodanam;
pūrvapakṣam avijñāya dūṣako'pi vidūṣakaḥ. 372
Sugato'pi mṛgo jāto mṛgo'pi sugataḥ smṛtaḥ;
tathā'pi sugato vandyo mṛgaḥ khādyo yatheṣyate. 373
tathā vastubalād eva bhedābhedavyavasthiteḥ;
codito dadhi khādeti kim uṣṭram abhidhāvati. 374
atraivobhayapakṣoktadoṣārākānavasthiteḥ;
ananvayādidoṣokteḥ prapañco vā'nayā diśā. 375
mithyottarāṇām ānantyāt śāstre vā vistareṇoktitaḥ 3;
sādharmyādisamatvena jātir neha pratanyate. 376
—NyV., II. 371-376

73 Veṅkaṭanātha, author of the *Nyāya-pariśuddhi* mentions a number of other varieties, e.g. *pratidharmasama* (also called *pratirodhasama*), *anekāntasama*, *viruddha-sama*, *asiddhi-sama*, etc. (See *Nyāya-pariśuddhi*, pp. 236ff).

74 Pratisamādhāne tu sarvajātīnām anyathānupapatti-lakṣaṇānumānalakṣaṇa-hetuparīkṣaṇam eva. na hy aviplutalakṣaṇe hetāv evaṁprāyāḥ pāṁśupātāḥ prabhavanti....jātiprayoge ca pareṇa kṛte samyag-uttaram eva vaktavyaṁ na pratīpaṁ jātyuttarair eva pratyavastheyam āsamañjasya-prasaṅgād iti.—PM., II. 1.29 (*Vṛtti*).

75 Tāni ca samyag-ghetau hetvābhāse vā vādinā prayukte jhaṭiti taddoṣa-tattvāpratibhāse hetupratibimbaprāyāṇi pratyavasthānāni.
—PM.-*Vṛtti*, II. 1.29.

76 See NV., pp. 529-530; NVTT., pp. 354, 672.

CHAPTER 6

CHECKS IN DEBATE

(*Nigrahasthānas*—Grounds of Censure or Defeat)

Nigraha signifies crushing the pride of another, here inflicting check or defeat on the part of one whose pride is unshaken; *pratijñāhāni* (violating the proposition) and the like are the grounds (*sthāna*) of this; that is to say, it is by reason of these that defeat can be inflicted in a debate and so they are called *Nigrahasthānas* (Grounds of censure or defeat).[1] The urging or the exposure of these we shall call 'check'.

The *Nyāya-sūtra* defines *Nigrahasthāna* as follows—'*Vipratipattir apratipattiś ca nigrahasthānam.*—NS., 1.2.19 (It is a case of 'check' when there is misapprehension as also when there is incomprehension). Misapprehension (*vipratipatti*) is that apprehension which is either wrong or reprehensible (*viparītā vā kutsitā vā pratipattir vipratipattiḥ*—NB., 1.2.19). As Vācaspati explains, a misapprehension is said to be simply wrong knowledge when the subject-matter is something too subtle to be grasped by the ordinary intellect; it is said to be reprehensible when it is about something gross, quite within the range of ordinary minds (*sūkṣma-viṣayā pratipattir viparītā, sthūlaviṣayā ca kutsitā.*—NVTT., p. 354). It is a case of incomprehension (*apratipatti*), on the other hand, when the subject being one on which something has been said, if the debater does not say anything; for instance, if he does not oppose what is attempted to be proved by his opponent, or does not answer the objections that have been raised against his own position (*apratipattis tv ārambha-viṣaye'py aprārambhaḥ. pareṇa sthāpitaṁ vā na pratiṣedhati pratiṣedhaṁ vā noddharati.*—NB., 1.2.19). Vātsyāyana says the words '*vipratipatti*' and '*apratipatti*' are not compounded in the *sūtra* to

indicate that these two are not the only *nigrahasthānas.* * Uddyotakara gives further clarification of the definition by saying that it may happen that a debater supports his thesis by a perfectly sound argument and yet when his opponent meets him with a *jāti*, he becomes embarassed and fails to find the proper answer to that *jāti* Even this is a case of *nigrahasthāna* as there is here incomprehension inasmuch as the man does not comprehend the soundness and strength of his own argument, and misapprehension as he regards his own sound argument as unsound.[2] Udayana is not satisfied with the *Nyāya-sūtra* 1.2.19 as it stands and takes it as implying the following general definition : When controversy has been started, any behaviour indicative of either party's ignorance constitutes a *nigrahasthāna*

Twenty-two varieties of *nigrahasthānas* are described in the *Nyāya-sūtra* 5.2—(1) *Pratijñā-hāni* (violating the proposition), (2) *Pratijñāntara* (shifting the proposition), (3) *Pratijñā-virodha* (contradicting the proposition), (4) *Pratijñā-sannyāsa* (renouncing the proposition), (5) *Hetvantara* (shifting the probans), (6) *Arthāntara* (irrelevant argument), (7) *Nirarthaka* (meaningless jargon), (8) *Avijñātārtha* (unintelligibility), (9) *Apārthaka* (incoherence), (10) *Aprāptakāla* (inconsequentiality), (11) *Nyūna* (deficiency), (12) *Adhika* (redundance), (13) *Punarukta* (repetition), (14) *Ananubhāṣaṇa* (non-reproduction), (15) *Ajñāna* (incomprehension), (16) *Apratibhā* (inability to answer), (17) *Vikṣepa* (evasion), (18) *Matānujñā* (confession or approval of a contrary opinion), (19) *Paryanuyojyopekṣaṇa* (overlooking the exceptionable or what should be objected to), (20) *Niranuyojyānuyoga* (finding fault with what is unexceptionable), (21) *Apasiddhānta* (inconsistency), (22) *Hetvābhāsa* (fallacy of probans).÷

* Vācaspati says that ' *ca* ' in the *sūtra* refers to all the other *nigrahasthānas* described in NS., 5.2.

÷ Of these *pratijñā-hāni* (—the *pratijñā-hāni* of the *Caraka Saṁhitā* corresponds to *pratijñā-sannyāsa* of the *Nyāyasūtra*—), *pratijñāntara*, *pratijñā-virodha*, *avijñātārtha*, *ananubhāṣaṇa*, *ajñāna*, *apratibhā*, *vikṣepa*, *apasiddhānta* are not mentioned in the *Caraka-Saṁhitā*.

Vātsyāyana's *Bhāṣya* on the *Nyāya-sūtra* 1.2.20 points out that of these *ananubhāṣaṇa*, *ajñāna*, *apratibhā*, *vikṣepa*, *matānujñā*, *paryanuyojyopekṣaṇa* are due to *apratipatti* (cinomprehension) and the rest due to *vipratipatti* (mis-comprehension).

(1) According to the *Nyāya-sūtra*, it is a case of *Pratijñā-hāni* (violating the proposition) when the property of the counter-example (*prati-dṛṣṭānta*) (adduced by the opponent) is admitted by a debater to be present in the example (*dṛṣṭānta*) cited by himself (*prati-dṛṣṭānta-dharmābhyanujñā svadṛṣṭānte pratijñā-hāniḥ.*—NS., 5.2.2.). The *prativādin* opposes the argument of the *vādin* on the basis of a certain property which is contrary to the probandum; if the *vādin* admits that the contrary property which belongs to the *prati-dṛṣṭānta* cited by the *prativādin* is present in the *dṛṣṭānta* cited by himself, he violates his own thesis. For instance, the original argument is advanced in the form : *Śabda* (sound, letter-sound, word) must be non-eternal, because it is perceptible by the sense, like the jar (*anityaḥ śabdaḥ aindriyakatvād ghaṭavad*). The *prativādin* rejoins: *Sāmānya* (generality) which is eternal is perceptible by the sense, why cannot *śabda* also be similarly eternal ? On this the *vādin* may say, 'If *sāmānya* perceptible by the sense is eternal, let jar also be eternal.' He wants to say that the jar will have to be accepted as eternal. While thus trying to urge a contingency about the *dṛṣṭānta*, jar having to be eternal, he renounces his own thesis or stand down to the final conclusion, and doing so he violates his proposition.[3]

Uddyotakara does not approve of this explanation given by *Vātsyāyana*. In the illustration given in the *Bhāṣya*, by reason of the admission of eternality in his own *dṛṣṭānta* by the *vādin* it is the *dṛṣṭāntā* that becomes vitiated by being unreal (*asiddha*), that is to say, on account of not having the *sādhya*, non-eternality; so the *vādin* becomes defeated on account of the fallacy of the *dṛṣṭānta* or of the *probans*, and there is no violation of the proposition. Uddotakara gives his own

interpretation of the *sūtra*. The term *'dṛṣṭānta'* is to be taken in its literal sense of 'what is seen and is established at the end'; so *'svadṛṣṭānte'* means 'in one's own thesis or view,' and *'pratidṛṣṭānta'* means the counter–thesis or counter-view. Thus the meaning of the *sūtra* comes to be : 'When one admits the presence of the property of the counter–thesis in his own thesis, it is a cases of *pratijñā–hāni*'. For instance, the original thesis being '*Śabda* is non-eternal, because it is perceptible by the sense' (*śabdo'nityo dṛśyatvāt*), the *prativādin* urges against it the case of *sāmānya*, and the *vādin* says, 'If *sāmānya*, which is perceptible by the sense, is eternal, then *śabda* also must be eternal'. In this way does it become a case of *pratijñā–hāni* (violating the proposition). Since the *vādin* gives up a fact that has been definitely known by him to be true, and thereby shows his misapprehension of things, it becomes a case of censure or defeat. It may be urged that this is only a case of admitting of a possible contingency, viz. 'If, as you urge, *sāmānya* which is perceptible by the sense, is eternal, then *śabda* also may be so.' But this does not change the situation as even so the 'check' becomes applicable. Instead of defending his thesis against the charge of inconclusiveness (*anaikāntikatva*) he goes on to urge a possible contingency and thus becomes subject to 'check'.[4] Others (Dharmakīrti among them) have urged that *pratijñāhāni* is included under the fallacy of inconclusiveness (*anaikāntikatva*) attaching to the probans and so it need not be regarded as a *nigrahasthāna*; what the *vādin*, in the present case, would be checked by is the fact of his probans 'because it is perceptible by the sense' being inconclusive. This is not right because what makes him liable to 'check' is the fact of his not answering the charge of inconclusiveness and thus showing his ignorance, as can be seen from the fact that if he were to answer that charge he would not be defeated. Hence mere inconclusiveness does not constitute a *nigrahasthāna* here.

It may be remarked here that Vātsyāyana's explanation is not as absurd as Uddyotakara takes it to be. Both the

parties are in agreement as to the nature of the example. What the *vādin* does is to try to put the *prativādin* in an absurd position of having to regard the example 'jar' as eternal, instead of answering the charge of inconclusiveness. Thus the original proposition is shelved and remains unestablished.

Udayana remarks that the *sūtra* describes two kinds of *pratijñāhāni*; one is described by the very name '*pratijñā-hāni*', and the other by the rest of the *sūtra*..[5] The example of the former kind would be that case where the *vādin* entirely surrenders his point by saying, " Alright, *śabda* is not non-eternal." What is cited by the *Bhāṣya* is an example of the second kind. Udayana has further widened the scope of this *nigrahasthāna* by saying that it applies to all those cases where on there being opposition, the *sādhya* (probandum) or the *sādhana* (probans) or the *pakṣa* (subject) or an epithet (*viśeṣaṇa*) of the *sādhya* or of the *pākṣa* or of the *sādhana* or of the *dṛṣṭānta* is renounced or violated. Or when, for instance the *vādin* urges the fallacy of *asiddha hetu* (unreal probans) in the *prativādin's* argument and the latter proves that it is not there, if the *vādin* says, 'If there is not *asiddha* (unreal) there is *bādhita* (contradicted) reason', this also is a case of *pratijñā-hāni*.[6] The later logicians also include all these under *prātijñā-hāni*. Veṅkaṭanātha gives this *nigrahasthāna* the name '*uktahāni*' (NP. p. 176).

A case of *pratijñā-hāni* would occur in the third step or later steps or stages of the debate and would be exposed in the fourth and later stages. It should not be urged in a *vāda* as this would not contribute to the acquirement of true knowledge; and it would also be in accordance with the true spirit of a genuine *vāda* to give up what is found to be wrong, but if it is *sad-viṣayā*, that is to say if the proposition violated is real in content, then *pratijñā-hāni* should certainly be urged even in a *vāda* as this is necessary in the cause of the acquirement or imparting of true knowledge. This like all *nigraha-sthānas*, being urged in *jalpa* or *vitaṇḍā* serves to embarass the opponent.

The idea behind *pratijñā-hāni* is that one should prove the proposition one has set forth and not abandon it (*uktaṁ nirvāhayen na tu parityajed iti rahasyam.*—VV., p. 30; *uktaṁ nirvāhayed iti rahasyam atra.*—BS., p. 84).

(2) It is a case of *pratijñāntara* (shifting the proposition) when on the subject of the original proposition having been denied (by the opponent on the strength of a counter-example), the *vādin* finds a diversity in the properties of the example and the counter-example, and puts it forward with a view to establish the former proposition (*pratijñātārtha-pratiṣedhe dharma-vikalpāt tadarthanirdeśaḥ pratijñāntaram.*—NS., 5.2.3). For instance, the original argument is '*Śabda* is non-eternal, because it is perceptible by the sense, like jar.' To this the *prativādin* says, '*Sāmānya* is perceptible by sense and yet it is eternal; similarly *śabda* also must be eternal. Now the *vādin* notes that there is divergence in the characters of the *dṛṣṭānta* (jar) and the counter-example (*sāmānya*); *sāmānya* is all-pervading while jar is not all-pervading. So he puts this forward with a view to establish his own proposition. He argues, "Just as the jar is not-all-pervading, so is *śabda* not-all-pervading and hence like the jar it also should be non-eternal also." It can be seen that this proposition 'Word is not-all-pervading' is different from the original proposition 'Word is non-eternal'. This is a *nigrahasthāna* by reason of the fact that one proposition does not prove another proposition, only probans and example can prove a proposition. Hence the putting forward of what cannot prove a proposition is futile and becomes a *nigrahasthāna*.

Uddyotakara explains this by saying that it becomes a *nigrahasthāna* because the man does not know the real character of the probans; without knowing the real character of the probans the *vādin* argues that being not-all-pervading, *śabda* must be non-eternal. On account of the *vādin's* not knowing and not putting forward the correct probans this becomes a *nigrahasthāna* due to either misapprehension. Vācaspati rightly adds that when the *vādin* puts forward the

fact of *śabda* being not–all-pervading, the idea in his mind is that after having brought this to the notice of the other party, he would add this as a qualifying clause to his original premiss and state it thus : ' Because *śabda* while being not–all-pervading is perceptible by sense, it must be non-eternal'. But he has not done this and so his position is obviously subject to the said 'check'. Expression matters very much in *parārthānumāna* or inference meant to convince others.[7]

Udayana's contention is that the very need to have to revise one's proposition by adding a qualifying phrase is a *nigraha-sthāna*. It is four-fold according as the qualification has to be added to the *pakṣa* or the probandum or their epithets. For instance, the original proposition is, '*Nityā varṇāḥ śrāvaṇatvāt śabdatvavat*' (letter–sounds are eternal because they are audible like *śabdatva*, the class–character of *śabda*); the opponent takes objection to this that this is inconclusive as sounds are audible and yet they are non-eternal. Then the *vādin* revises his proposition by saying, ' Letter-sounds along with sounds are eternal' (*sadhvanaya eva nityāḥ*). Here the *pakṣa* of the original proposition is qualified to avert the fallacy of inconclusiveness.[8] Veṅkaṭanātha says that there can be many varieties of *pratijñāntra* also according as the qualification is added to the *pakṣa, sādhya, hetu, dṛṣṭānta*. their epithets or the *pramāṇas* adduced in proof of the original proposition and so on. So he calls it *uktaviśeṣaṇa* (qualifying what is already stated on fault being found with it) instead of *pratijñāntara* (*aviśeṣita-pūrvokte dūṣite tadviśeṣaṇa-nikṣepa ukta-viśeṣaṇam.* —NP., p. 178). *Hetvantara* of the *Nyāya-sūtra* is included in Veṅkaṭanātha's *ukta-viśeṣaṇa*.

The idea behind this *nigrahasthāna* is that from the very outset one's proposition should be perfectly worded so that one has not to qualify it later (*kakṣāntare na viśeṣayed iti rahasyam*). Veṅkaṭanātha gives a practical advice that if one finds that one's proposition is not sufficient one must in a *jalpa* or *vitaṇḍā* very cautiously establish it by putting a different

meaning or it and the like devices but one must not qualify it (*prāg eva puṣkalaṁ vadet apuṣkaloktaṁ tu jalpavitaṇḍayos tātparyabhedādinā nirvahet na tu viśeṣayed iti rahasyam*—NP, p. 180). The difference between *pratijñā-hāni* and *pratijñā-ntara* is that in the former the proposition is given up while in the latter some qualification is added to avert a fallacy (*tatra tyāga iha pūraṇaṁ viśeṣaḥ*—VV., p. 31). This also occurs in the third or a latter stage of the debate and is urged in the next.

(3) When there is contradiction between the proposition and the probans, it is a case of *Pratijñā-virodha* (contradiction of the proposition) (*Pratijñā-hetvor virodhaḥ pratijñā-virodhaḥ.*—NS., 5.2.4). For instance, the proposition is : ' Substance must be different from quality ' (*guṇavyatiriktaṁ dravyam*) and the statement of the probans is in the from, ' because no object other than colour, etc. is perceived ' (*rūpādito'rthāntarasyā-nupalabdheḥ*). There is contradiction between these because if substance is different from quality, then it is not possible that no object other than colour, etc. should be perceived, while if the latter is true then it is not possible that substance should be something different from quality.

Udayana * remarks that the contradiction between the proposition and the statement of the probans has been mentioned only by way of illustration; as a matter of fact there is *pratijñā-virodha* whenever there is any inconsistency between any two factors of reasoning, or between the words (-or their meaning-) of the statement of any of these or when the proposition is inconsistent with a well-ascertained fact, and in other like cases.[9] Hence Veṅkaṭanātha gives the name *uktavirodha* to this *nigrahasthāna* (*svoktasya svenaiva viruddha-karaṇam uktavirodhaḥ*—NP, p. 183).

Uddyotakara illustrates seven kinds of *pratijña-virodhas*: (*i–ii*) proposition and statement of the probans contradict each other, e.g. ' Substance is different from quality, because

* Uddyotkara and Vācaspati also, before Udayana, held this view as can be seen from the different types mentioned by them.

it is not perceived as different from it.' Here the proposition contradicts the statement of the probans, because the former is the stronger of the two, being more in keeping with actual perception. In 'All things are diverse (i.e. there is no unity) because positive terms are always applied to an aggregate (which must be one) of things' (*sarvaṁ pṛthak samūhe bhāvaśabda-prayogāt*), the proposition is contradicted by the statement of the probans, which is the stronger of the two; (*iii*) The words of the proposition itself are self contradictory e.g. 'The female ascetic is with child' (*Śramaṇā garbhiṇī*); (*iv*) The proposition is contradicted by the *dṛṣṭānta* (example), e.g. Word is non eternal, because it is knowable, like *ākāśa* (*anityaḥ śabdaḥ pramayetvāt ākāśavat*); (*v*) The statement of the probans is contradicted by the example, etc., e.g. ' Word is non-eternal because it is perceptible by the sense, like the dyad ' (—which is as a matter of fact insensible) (*anityaḥ śabda aindriyakatvād dvyaṇukavat*); (*vi*) contradiction of the proposition and the statement of the probans by well known facts; (*vii*) when the *prativādin* urges against the *vādin* the fallacy of inconclusiveness (*anaikāntikatva*) on the basis of something that is possible only according to the doctrine of the *vādin*, he incurs this 'check' of contradiction. For instance, when in answer to the Naiyāyika's argument about the non-eternality of *śabda* by reason of its being sensible, the Buddhist tries to show the inconclusiveness of the probans by citing the example of the universal 'cow' (*gotva sāmānya*), which is a real entity only in the view of the Naiyāyika, he is subject to this check. The probans is contradictory when it is put forward without taking into account one's own main doctrine; for example, when in opposition to the above mentioned original argument the Buddhist sets up his opposition on the basis of the eternality of the universal ' cow ' (*gotva*) which is possible only if there is one unitary whole consisting of several individuals (which is incompatible with the *prativādin*'s tenets). It is only when the counter-instance (*prati-dṛṣṭānta*) urged is

such as is compatible with the doctrine of both parties that it can be a case of inconclusiveness (*anaikāntikatva*). The citing of the wrong example has not been mentioned among *nigrahasthānas* because wrong examples are always preceded by, and based on, fallacious probans and as such should be regarded as comprehended by the mention of the latter. If the example is wrong, the probans supported by it becomes invalidated. According to Udayana, *pratijñā-virodha* can be urged also when the wording of the probans or the example is self-contradictory and when the *pratijñā* and the *nigamana* (conclusion), or the proposition (*pratijñā*) and *tarka* (hypothetical reasoning) are contradictory. It can also occur when a thing or its epithet is negated or affirmed directly or through a qualification.[10]

The idea behind this *nigrahasthāna* is that one should not say anything which involves a conflict of meaning (*mithovyāhataṁ na vaded iti rahasyam*). This *nigrahasthāna* can occur even in the first stage of the debate and is to be urged in the next one. It should be exposed in a *vāda* also as it comes in the way of the grasping of truth.

Veṅkaṭanātha, who calls this *nigrahasthāna* '*uktavirodha*', describes a still wider application of it. All contradictions—verbal (*śābda*) (e.g. *īśvaraḥ-anīśvaraḥ*) and pertaining to meaning (*ārtha*) or factual (e.g. *īśvaraḥ karmavaśyaḥ*) are included under it. Besides, behaving in opposition to the rules one has accepted is also included under *uktavirodha;* for example, when one having accepted to speak in Sanskrit speaks in Apabhraṁśa, or having agreed to reproduce all that is stated by the opponent, reproduces only what he wants to criticise or refute, or having agreed not to make gestures one makes them. Similarly fault (*doṣa*) of word (*pada*), sentence (*vākya*), scanning, etc. are all included in *ukta-virodha*, the idea behind it being that one must not say or do anything which contradicts what one has said or accepted.[11]

(4) It is a case of *Pratijñā-sannyāsa* (renouncing the proposition), if the original thesis having been opposed,

what was formerly affirmed happens to be retracted (*Pakṣa-pratiṣedhe pratijñātārthāpanayanaṁ pratijñā-sannyāsaḥ*—NS., 5.2.5). For instance, the original thesis is formulated thus : *Śabda* is non-eternal, because it is perceptible by the sense, like jar '. The *prativādin* opposes this by saying, ' *Sāmānya* is perceptible by the sense and yet is not non-eternal; similarly *śabda* also which is perceptible by the sense, is not non-eternal'. If on this, the *vādin* retracts his original thesis by saying, ' Who says that *śabda* is non-eternal ? ' It is a case of *pratijñā-sannyāsa.* This denial or renunciation can take many forms, e.g. ' I did not say so,' 'I was only stating the other party's view,' 'This is what you actually said and now you are fathering it on me ', ' I was only reproducing what you (or someone else) said ', ' A bystander said this' and so on.

Veṅkaṭanātha calls *pratijñā-sannyāsa 'uktāpalāpa'* (denial of what has been stated) to avoid confusion with *ukta-hāni* (i.e. *pratijñā-hāni*), since *'sannyāsa'* and *'hāni'* signify the same thing; and includes the denial of what one has done against the accepted rules also under it.[12] The idea behind this *nigrahasthāna* is that one must not deny in a debate anything said or done which is comprehended or noticed by the members of the assembly (*sabhya*). This *nigrahasthāna* occurs in the third or a later stage of the debate and is to be exposed in the next one, this 'check' not being applied in a *vāda.*

Dharmakīrti objects to this *nigrahasthāna* on the ground that the *vādin* having been already defeated by the pointing out of the inconclusiveness (*anaikāntikatva*) of his probans, there is no need for any further 'check '. Vācaspati answers this by saying that when the person finds that unless he renounces his proposition, he would be faced with the fallacy of inconclusive probans (*anaikāntika-hetu*) (— a *hetvābhāsa,* the explicit exposure of which would bring an end to the debate—), he with a view to save himself from that retracts the proposition, so that this retraction comes in before the charge of inconclusiveness is explicitly brought home to him, and until this is done, he cannot be defeated.[13]

(5) The probans in the unqualified form having been opposed, if the *vādin* desires to qualify it, it is a case of *Hetvantara* (shifting the probans) (*Aviśeṣokte hetau pratiṣiddhe viśeṣam icchato hetvantaram*—NS., 5.2.6). For instance, the original argument is stated in the form: "Everything that is manifested has a single origin, because products emanating from a single origin have a definite magnitude. In the cup and other products of clay we find a definite magnitude, the products being of the same magnitude as the original substance; and such magnitude is found in every product and every manifested thing is found to have a definite magnitude; hence from the fact that every product emanating from a single origin has a definite magnitude, we conclude that everything that is manifested emanates from a single origin." Against this reasoning, the following opposition is set up by the *prativādin* with a view to showing that the probans (*hetu*) is not invariably concomitant with the probandum (*sādhya*): "As a matter of fact, magnitude is found to be present in products emanating from the same origin as also in those emanating from several origins." On this, the *vādin* qualifies the reasoning thus: "Because a definite magnitude is found in the cup and other products, in all of which there subsists the same original substance, clay; every manifested thing, which having subsistent in it pleasure, pain, delusion (the constituents of *Prakṛti* or Primordial Matter) is found to have a definite magnitude; and from this it follows that no other original substance being found to subsist in all manifested things, they must all have a single origin (viz. *Prakṛti*)" In the first instance, the probans was stated in an unqualified form, 'Because they have a definite magnitude'; when this was objected to, a qualification was added, 'while having the same original substance subsisting in them'. This, thus, is a case of *Hetvantara*.[14]

Vātsyāyana goes on to say that this is a *nigrahasthāna*, because the second qualified probans having been put forward by the *vādin*, if he states a *dṛṣṭānta* (example) to corroborate

what he has said, then that manifested thing cited as *dṛṣṭānta* (which, as such, cannot be included in the proposition) could not be an emanation from that single origin, because by its nature of example, it must be an emanation from another origin. That is to say, if the *dṛṣṭānta* is not included in 'all', the *pakṣa* (subject) of the proposition, then what is predicated of the 'all' will not be true of the *dṛṣṭānta*; and if the *dṛṣṭānta* be included in it, it could not be a *dṛṣṭānta*. On the other hand, if no *dṛṣṭānta* is cited, then the probans not having its truth corroborated by an example, cannot prove the desired conclusion; and thus the probans turning out to be futile, the *nigrahasthāna* remains in force. It seems that this was not intended by the author of the *Nyāya-sūtra*. Uddyotakara also does not say anything with regard to this. This explanation of Vātsyāyana might be true of this particular instance but not of all cases of *hetvantara*. What is meant by *hetvantara* is, as Uddyotakara rightly says, that the *vādin* by setting up another probans shows the weakness of the probans adduced earlier, for if the previous probans be efficient, there would be no sense in adducing another (*sādhanāntaropādāne pūrvasyā'-sāmarthyakhyāpanān nigrahasthānam iti, sāmarthye vā hetvantaraṁ vyartham iti*—NV., p. 554).

Udayana extends the application of this *nigrahasthāna* by saying that '*hetu*' stands for the probative part (*sādhaka-bhāga*) of the syllogism. It is four-fold according as the probans, or the part adducing the *dṛṣṭānta* or the *upanaya* (application) or the refutation (or condemnation) is qualified. The first is illustrated in the *Bhāṣya*. The second can be illustrated as follows : A Buddhist says, 'What is existent is momentary, as for example, jar'. The *prativādin* objects to this by saying that the *dṛṣṭānta* jar is *sādhyavikala* inasmuch as it is not momentary. On this the *vādin* qualifies his example by saying, 'Then let the jar be one which is limited by its instant of origination' (*astu tarhi kurvat-kṣaṇāvacchinno ghaṭaḥ*). An instance of the third would be as follows : The argument is, 'Word is non-eternal, because being possessed of *sāmānya-viśeṣa*

(generality-cum-particularity) it is perceived by the external sense-organ of people like us; whatever is perceived by the sense-organ of people like us, is non-eternal, as for example, the jar which is possessed of *sāmānya-viśeṣa*; so is word perceptible by the external sense-organ of people like us (—*upanaya*—), therefore it is not-eternal' (*anityaḥ śabdaḥ, sāmānya-viśeṣavato'-smadādibāhyakaraṇa-pratyakṣatvāt, yad asmadādi-bāhyakaraṇa-grāhyaṁ tad anityaṁ dṛṣṭaṁ yathā sāmānya-viśeṣavattve sati ghaṭaḥ, tathā cāyam asmadādibāhyakaraṇa-pratyakṣaḥ, tasmāt tathā*). Here the opponent finds fault with the *upanaya* as being insufficient; on this the *vādin* qualifies it by saying, 'So is word, possessed of *sāmānya-viśeṣa*, perceptible by the external sense-organ of people like us' (See BS., p. 87). An illustration of qualifying the refutation is as follows : The proposition is 'Word is non-eternal because it is knowable'. The *prativādin* finds fault with this by saying that the probans is inconclusive as it is found in the *sapakṣa* (homogeneous instance). The *vādin* objects to this by saying that it is a *jāti* type of argument. On this the *prativādin* revises his statement by saying that the probans is inconclusive because 'while being present in the *vipakṣa* (heterogeneous instance) it is found in the *sapakṣa*' (*vipakṣagatatve sati sapakṣe sattvād*).

Udayana draws a fine line of distinction between *pratijñāntara* and *hetvantara*, though as seen above he has illusrated a wider application of both than his predecessors. *Pratijñāntara* is applicable to the revision of the *pratijñā*, or the revision of the *prayojya* or *sādhya* part of the third number of the syllogism (i.e. of the *vyāpti*) or the revision of *nigamana*; that is to say, the revision of the *sādhya* part of the syllogism is included in *pratijñāntara*; whereas the revision of the *sādhaka* part of the syllogism (viz. *hetu*), the *prayojaka* part of the third number, (i.e. the example cited), the *upanaya* and the refutation (*dūṣaṇa*) is included in *hetvantara* (See BS., p. 87). Veṅkaṭanātha does not regard *hetvantara* as a distinct *nigraha-sthāna*, but includes it under *uktaviśeṣaṇa* (which corresponds to both *pratijñāntara* and *hetvantara*) (See NP., p. 178).

The idea behind *hetvantara* is that one must not qualify what one has said by way of proof or refutation. This *nigrahasthāna* can occur in the third or any of the later stages and is urged in the next stage after its occurrence, though not so in a *vāda*.

Nigrahasthānas 6–9 consist in the non-apprehension of what is needed for the desired purpose.

(6) The putting forward of statements having no relevance to the matter in hand constitutes *Arthāntara* (Irrelevance) (*prkṛtād arthād apratisambaddhārtham arthāntaram.*—NS., 5.2.7). The matter in hand is the proving of the probandum by a proper probans. The *vādin* might make the following statement, " That word is eternal, is proved by the *hetu* (probans) 'because it is is intangible ' " (*nityaḥ śabdo' sparśatvād iti hetuḥ*). Having gone so far he finds that his probans is not valid so he goes on to say, "The term '*hetu*' is a verbal noun derived from the root '*hi*' and affix '*tun*' ; a term is either a noun or a verb or a preposition or an indeclinable particle; the noun is that word....and so on." All this has nothing to do with the proposition, hence it is a case of *Arthāntara* or irrelevant statement.

Udayana says that it is an instance of *arthāntara* when having started to set forth the refutation one does not continue to state it but talks irrelevantly (*prakṛtaṁ sādhanaṁ dūṣaṇaṁ copakramya tad anabhidhānam arthāntaram*—BS., p. 94). It is four-fold according as the irrelevant statement is in accordance with the speaker's own school of thought or with the opponent's, or another school of thought or with both or with neither.[15] The idea behind this *nigrahasthāna* is that one must not say anything that is not relevant to the matter in hand; one must state only that which is useful to the establishing of what is to be established (*prakṛtopayuktam eva vācyam iti rahasyam*). *Arthāntara* can occur in any of the stages of the debate and is to be exposed there and then.

(7) That which is like the mere repeating of the alphabet is *Nirarthaka* (meaningless jargon). (*Varṇakrama-nirdesavan*

nirarthakam (NS., 5.2.8). For instance, " Word is eternal because *ka-ca-ṭa-ta-pa* are *ja-ba-ga-ḍa-da-śa*, like *jha-bha -ñ-gha-ḍha-dha-ṣa*". Such a statement has no meaning whatsoever. Since the mere letters of the alphabet can have no denotation, they cannot express anything.

Now, one feels that one does not come across such an argument in actual life. This must have struck Vācaspati also who points out that we have an example of *nirarthaka* when the Drāviḍa puts forward his argument in his own vernacular to convince an Ārya who does not understand the former's language; this argument conveys no meaning to the Ārya and seems to be but a jumble of so many letter-sounds. There is no sense in arguing when the opponent does not understand a word of what you are saying.[16]

Udayana says that *nirarthaka* signifies non-expressive statement. It is possible in four ways : (*i*) when the debater carelessly uses a wrong gender, number or case (*vibhakti*), (*ii*) when the debater has a wrong conception of *kṛt*, *taddhita* and *ākhyāta* (verb) and uses one instead of another; (*iii*) by force of habit, as when starting to speak in Sanskrit one switches over to Apabhraṁśa; (*iv*) when a word can be said to have a meaning, but this meaning does not suit the context, and so is as good as a mere utterance conveying no meaning.[17] The idea behind this 'check' is that one must use such words as convey the same meaning to both the parties in a debate. Otherwise they would not understand each other (*samāna-samayair eva padair vaktavyam iti rahasyam*). If it is not fixed before the debate starts as to which language is to be used then one may speak in any convenient language provided the other party understands it. But if a particular language is fixed upon, then inadvertent use of another language is liable to this check.[18] Veṅkaṭanātha gives the name *avācaka* to this *nigrahasthāna* (*śabda-śāstra-viruddha-svarūpam avācakam*—NP., p. 191). This *nigrahasthāna* can occur in any of the stages of the debate and 'check' is applied there only.

(8) If the statement made is such that though stated three times, it fails to be understood by the audience and the *prativādin*, it is a case of *Avijñātārtha* (unintelligibility) (*Pariṣat-prativādibhyāṁ trir abhihitam apy avijñātam avijñātārtham.* -NS., 5.2.9). This happens when the statement consists of words with double meanings, or of such words as are not met with in ordinary usage, or when the words are uttered very hurriedly, and so forth. Since the man makes use of unintelligible expressions intentionally, with a view to cover the weakness of his reasoning, this constitutes a *nigrahasthāna*. Udayana says that it is three-fold according as the statement made (*i*) is highly technical, peculiar to each one's own system of thought, e.g. concerning five *skandhas*, twelve *āyatanas*, four *ārya satyas* in the case of Buddhists, which the *prativādin* or the audience cannot understand, or a reference to *sphya*, *kapāla*, *puroḍāśa* on the part of the Mīmāṁsaka, and so on; (*ii*) consists of words which are not in current usage, though they can be explained on the strength of their etymological derivation, e.g. *Kaśyapa-tanayā-dhṛtihetur ayaṁ trinayanatanayayāna-samānanāmadheyavān tatketumattvāt rasinīvat.* [*Kaśyapatanayā*=earth; the mountain is the cause of its stability (*taddhṛtihetu*); *trinayana-tanaya*=*Kārtikeya*, the peacock is his carrier (*yāna*), the peacock being called '*śikhī*' which also means '*fire*'. *Rasinī*=kitchen.] Thus the expression means 'Mountain has fire because it has smoke, like the kitchen'. Its literal meaning is : The mountain which is the cause of the stability of earth has that (viz. fire) which has the same name (viz. *śikhī*) as peacock, the carrier of the son (viz. Kārtikeya) of the god having three eyes (Śiva), because it has its banner or sign (viz. smoke), like the kitchen); (*iii*) consists of common words whose meaning cannot be determined in the absence of a determining factor, or outside the context; e.g. '*śveto dhāvati*' (white is running) Here a doubt arises whether a dog is running or a leper.

If one debater is not checked for making such a statement the other party also cannot be checked and then the debate would not remain a debate at all. The rule as to the check being applied only when a statement is uttered thrice and yet is not understood is a very reasonable one in view of the inattentiveness, or slow understanding, or doubt arising in the mind, of the other party or the audience. Morever, in the absence of this rule, the other party not finding a correct answer, would be tempted to charge the opponent with using an expression which was unintelligible, and the judges also —not always very attentive or very intelligent—would very likely agree that it could not be understood (see BS., pp. 97–99).[19]

Veṅkaṭanātha says that if it has been so agreed upon, even *prahelikās* (riddles), etc. can be used, and the parties may even employ *Mahāvidyā* syllogisms and the like. Of course, the debate would then become highly scholastic and the debaters would be only showing off their scholarship.[20] But ordinarily the debaters should use expressions which are in current usage (*nirūḍhair eva padair vaktavyam iti rahasyam.*— BS., p. 99).

(9) It is a case of *Apārthaka* (incoherent statement) where there being no connection between the expressions following one another, they yield no connected meaning. (*Paurvāparyā-yogād apratisambaddhārtham apārthakam*—NS., 5.2.10). As Vātsyāyana says, where either among several words or several sentences, there is no possibility of proper sequence and connection and hence the whole is found to be disconnected, it is a case of *Apārthaka*, since no meaning obtains from the words or sentences taken collectively; for instance, 'Ten pomegranates, two cakes; this is deer-skin; her father is old'. Udayana says that *apārthaka* is three-fold : (*i*) primary, as illustrated in the *Bhāsya;* (*ii*) absence of connection due to separation of words, e.g. '*Gacchati payasā aśvena bhuktvā*' (when the speaker really wants to say '*payasā bhuktvā 'śvena gacchati*', 'goes on a horse after having taken food along with milk'; (*iii*) when the *prativādin* puts forth all alternative ways of

connecting syntactically the words of a statement, and refutes all of them, the non-acceptance of it owing to the refutation of all possible alternative syntactical connections is an instance of *apārthaka*. Here the words have a meaning, but their connection cannot be shown. Some hold that there is a fourth variety of *apārthaka*, which is due to an inefficient or insignificant epithet; for instance, 'Word is non-eternal, because while being knowable it is brought about' (*śabdo'nityaḥ prameyatve sati kṛtakatvād*); here 'while being knowable' has no significance. But this can be included among the *hetvābhāsas*, and as a matter of fact the statement is coherent, but for the fault of *vyāptyasiddhi* (the *vyāpti* not being real).[21] It might be urged that no normal person would employ the first kind of *apārthaka*. But this is not true. A man who is not very clever might use such expressions as the following which have an apparent coherence : "The *Vedas* recognised by the majority of people are not composed by the moderns; *saṁsāra* is beginningless; earth, etc. have no creator; and the world-phenomena are not without a cause." There is some sort of apparent link between these expressions : 'beginninglessless of *saṁsāra*' is adduced as a reason in support of recognition by the majority and non-composition by the moderns, for compositions of moderns are not recognised by the majority. (See BS., p. 101).

Uddyotakara says that no sense can be derived from a sentence in which the words are not connected with each other; and hence when a debater propounds an incoherent argument it shows that he does not know the character of the true probans, and so it becomes a *nigrahasthāna* Veṅkaṭanātha gives the name '*Ananvita*' to this *nigrahasthāna* (*ucitānvayaśūnyam ananvitam*—NP., p. 192). It may be remarked that in '*nirarthaka*' it appears as if the letters are unconnected as the meaning of words is not understood, whereas in *apārthaka* there are unconnected words or sentences.

(10–12) are concerned with the wrong presentation of one's case.

(10) When the factors of reasoning are stated in a wrong order it is a case of *Aprāptakāla* (Inconsequentiality). (*Avayava-viparyāsavacanam aprāptakālam*—NS., 5.2.11). Among the members of a syllogism, *pratijñā*, etc., there is a definite natural order in which they are stated, this order being based upon the nature of what is expressed by each of them; and when a statement is made in which this natural order is changed, it becomes a case of the *nigrahasthāna* '*aprāptakāla*', which signifies that what is expressed by the several factors is not found to form a connected whole.

We have a very interesting discussion in the *Vārttika* and the *Tātparya Tīkā* regarding the fixed order or otherwise of the factors of reasoning (*avayava*) Some people are of the opinion that *aprāptakāla* cannot be a *nigrahasthāna*, (*i*) as even so the argument is proved, (*ii*) because there is no fixed convention regarding the order in which the *avayavas* should be stated, and (*iii*) because in actual usage a reversal of the order of the factors is met with in all treatises. Under the circumstance whose is this rule regarding the order of the *avayavas*? Uddyotakara answers these arguments. (*i*) The first argument is analogous to the use of words in their incorrect forms Even when such incorrect forms of words as '*gāvī*' and the like are used in the sense of '*go*' and they do give us the idea of the animal, yet it is not useless to lay down the rule that the correct form of the word is '*go*', because what happens is that the corrupt form '*gāvī*' brings to the mind the correct form '*go*', which conveys the idea of the animal signified. Similarly, when the *avayavas* are stated in the wrong order, they bring to our mind the statement in the natural order, and it is the latter that gives the idea of what is expressed by it. It is thus that the proposition is found to be proved even when the *avayavas* are stated in the wrong order. That there is a natural order of things—such as, the objective is taken up first and then the instrument—is shown by several instances in ordinary experience; for instance, the clay-lump is taken first and then the wheel and

other instruments needed in making a jar out of clay. So here the proposition (*pratijñā*) which is the objective should be taken up first and then the instruments, viz probans, example, etc. (*ii*) As regards the second argument, we agree that there is no convention in the matter; but the natural order of things (spoken of by the different *avayavas*) is itself the deciding factor with regard to the order of the *avayavas*, and a person does not deserve to be criticised for laying stress upon the natural order of things, (*iii*) The third argument has no force; it only shows that the person who has advanced it does not understand what exactly constitutes the *nigrahasthāna*. The treatises he refers to are written for the purpose of providing a comprehensive knowledge of things and naturally the subject is stated in a compact form. But when one has to explain or expound what has been once stated in a compact form one has to resort to the syllogism with its *avayavas* in their natural order. * Such a compact or terse form of argument, though permissible in scientific treatises, is not permissible in a debate where every step in the reasoning is required to be stated clearly; and one should be very particular about the form of the argument, for like the two propositions the debaters also are put to test here; and what is examined and not found wanting is incorporated in the treatises. It is in this connection that the *Tātparya-Ṭīkā* quotes the passage '*kṛtsnāsad ivā"darabhūtad iva*', which contains in a very condensed form two arguments in favour of idealism: (*a*) The idealist says that he can prove the non-existence of all things except *vijñāna* (consciousness) in the same manner as the Nihilist (*kṛtsnāsat*) proves the non-existence of all things; and (*b*) he can prove the existence of *vijñāna* in the same manner as the Realist (*ādarabhūtat*) proves the existence of all things.[22]

* When arguing we do not always use the syllogistic form, but it is certainly present in our mind, and we would, or should be able to, state our argument accordingly if called upon to do so. Thus, for Indian logicians, the syllogism is indispensable for every sound argument.

Udayana, as is usual with him, extends the scope of the application of this 'check' by saying that the term '*avayava*' in the definition stands for the different parts of the debate as a whole. It is therefore four-fold according as the order of a *pāda* (quarter) or its portion, or the *avayava* or its portion is changed.[23] A debate is constituted of four *pāda*s (quarters). In the first *pāda*, the *vādin* formulates his argument and then anticipating any doubt that the *prativādin* may entertain as to the presence of a fallacy in this argument removes it briefly or at length. In the second *pāda*, the *prativādin* in a *jalpa* (disputation) finds fault with the reasoning of the *vādin* In the third he puts forward an argument to prove his own view, and anticipating that the *vādin* would urge some fallacy in his argument the *prativādin* tries to remove such a doubt. The fourth *pāda* consists of the decision as to victory etc., but it is not concerned with the application of 'check' so it is not important in this context. If the *vādin* at the very outset tries to remove a doubt as to the presence of a fallacy and then adduces a proof in support of his argument, it is an instance of *pādāmśa-viparyāsa* (change in the order of the components of a *pāda*). Or if the *prutivādın* starts with adducing proof in support of his own view and then finds fault with the other party's statement, it is a case of *pāda-viparyāsa* (change in the order of *pādas*). *Avayava-viparyāsa* is well known. '*Sakartṛkaṁ vivādādhyāsitaṁ*' (instead of *vivādādhyāsitaṁ sakartṛkam*', 'the thing under consideration has a creator or maker') is an instance of *avayavāṁśa-viparyāsa* (change in the order of the components of an *avayava*) (see BS., pp. 101–102).

Veṅkaṭanātha includes any disturbance of the order recognised in the procedure of a debate as a case of *aprāptakāla* (*vivakṣitakramasya viparyastakaraṇam aprāptakālam*-NP., p.195); for instance, starting the debate without the appointment of the members or the president of the assembly, and the like. The *Carakasaṁhitā* countenances, as we have seen, a wider application of this *nigrahasthāna* than the *Nyāya-sūtra*; it is

there called *kālātīta*. One incurs this 'check' on account of nervousness or the arrogance that one can prove one's point even while disregarding the recognised order of the proceedings. Veṅkaṭanātha says that in cases like '*anityaḥ śabdaḥ*', which are very common, though there is *avayavāṁśaviparyāsa*, still since the connection between the words can with ease be rightly established, one may overlook it in a debate where no rule with regard to the observance of order has been fixed (see NP., pp. 195–196). The idea behind this *nigrahasthāna* is that one must observe the order of things as required to do so by their expectancy or natural connection (*ākāṅkṣā-krameṇa brūyād iti rahasyam*—BS., p.102).

(11) That which is wanting in any one of the factors of reasoning is an instance of *Nyūna* (deficiency, deficient statement) (*Hīnam anyatamenā'py avayavena nyūnam*—NS. 5 2 12). This is a *nigrahasthāna*, because in the absence of a compete statement, the conclusion is not proved (*na sādhanābhāve sādhyasiddhiḥ.*—NV., p. 556)

Uddyotakara makes very illuminating remarks in connection with *nyūna* as also *adhika*. Some are of the view that there can be no such *nigrahasthāna* as *pratijñā-nyūna* (wanting in the proposition). But this is not right. We may ask them : "If a man propounds a statement without the *pratijñā*, is he or is he not checked ? If he is, the *nigrahasthāna* could not be any other than *pratijñā-nyūna*, for no other *avayava* is wanting, and there cannot be detected any defect of the probans and the like. If it is argued that he is not checked, then it follows that even an incomplete or deficient syllogism proves the conclusion; that is to say, the result is achieved without the means. If it is urged that the *pratijñā* consists in the accepting of a certain doctrine, this is not acceptable, because the *pratijñā* consists in the mentioning of the thing to be proved, whereas acceptance of a doctrine consists in the accepting of a certain fact which has been ascertained in all its aspects, general and particular.[24]

Veṅkaṭanātha gives a very wide interpretation of this *nigrahasthāna*. Stating a lesser number of *avayavas* than is deemed necessary in one's own system of thought is one kind of *nyūna*. If the *vādin* does not establish his own view and straightaway desires to condemn the other's view, it is an instance of *vāda-nyūna*. If without appointing the members of the assembly, a thesis is attempted to be proved, it is a case of *kathārambha-nyūna* (deficiency in respect of the start of the debate). In *aprāptakāla*, the order of things is changed, while here details are omitted Similarly while setting forth all possible alternatives (*vikalpa*) if one fails to mention one such possible alternative, it is a case of *vikalpa-nyūna* according to some. The idea behind this *nigrahasthāna* is that one must make a complete statement in accordance with the view of one's own school. (*Ātmasiddhānta-siddhaṁ pūrṇaṁ ca vaded ity ādeśaḥ*—NP., p. 200). For example, only a syllo_ism of five *avayavas* would be a complete argument for the *Naiyāyika*, while even a syllogism of the two *avayavas* recognised by the Buddhist would be a complete statement in his case. What is necessary is that one must make a complete statement (*paripūrṇaṁ vaded iti rahasyam.*—BS., p. 104).

(12) That which contains superfluous probans and example is *Adhika* (redundant) (*Hetūdāharaṇādhikam adhikam*—NS., 5.2.13). One alone being sufficient for the purpose in view, when more than one probans or example are adduced, one or the other must be superfluous. This however is to be regarded as a *nigrahasthāna* only when there is a restriction placed upon the debaters with regard to stating only what is actually necessary for the proving of their propositions (*ekena kṛtatvād anyatarasyā" narthakyam iti, tad etan niyamābhyupagame veditavyam iti.*—NB., 5.2.13)

Some contend that *adhika* cannot be a *nigrahasthāna* as this serves to strengthen the reasoning; several means of knowledge bring about a strengthened knowledge of a thing; for instance, smoke and light both enable us to obtain the cognition of the presence of fire. But this is not correct. What is meant by

strengthening? If it is said that the strength of the cognition consists in easier conviction, even then the difficulty is not overcome. What is meant by 'easier'? If it is meant that both the *hetus* or *dṛṣṭāntas* help to bring about the required cognition, the answer to this is that this is true, but when cognition has already been brought about by means of one, the mention of the second is entirely useless, this being like the bringing in of another light when the object has already been manifested by one. Further, there would be an infinite series of *hetus* and *dṛṣṭāntas*; if more than one were permitted, one could go on adding proof after proof even after the desired conclusion has been proved.[25]

Udayana says that *adhika* involves the statement of what is connected, useful, not repeated but whose purpose has already been served by another (*anvitam upayuktam apunaruktaṁ kṛta-karttavyam abhidhīyamānam adhikam iha grāhyam*.–BS., p. 104). Thus the definition would not apply to *apārthaka*, *arthāntara*, *punarukta* and yet lay a finger on the fault by saying that the purpose of this additional factor has already been served. The definition of the *Nyāya-sūtra* specifically mentions *hetu* and *udāharaṇa* to indicate that *adhika* in respect of the other *avayavas* is not possible. If there were two *pratijñās*, and if they were to convey the same meaning, it would be just repetition; if they do not convey the same meaning then the two *pratijñās*,—e.g. 'Word is non-eternal'; 'Earth etc. have a creator', would be incoherent and would convey no meaning. If the subject (*pakṣa*) be one, viz. '*Śabda* is non-eternal and a quality'), this would mean that it is irrelevant, and so on. This is true of *nigamana* (conclusion) also. *Adhika* of *upanaya* is not distinct from *hetvadhika*. Thus, it is but proper that only two, viz. *hetu* and *dṛṣṭānta*, be mentioned in the definition of *adhika* (see BS., pp. 105–106).

Veṅkaṭanātha includes a few more varieties under *adhika* viz. *vyāptyadhika* (statement of both positive and negative concomitance), *tarkādhika* (urging a number of contingencies

with regard to one thing), *dūṣaṇādhika* (urging more than one fallacy). Adding *'ādi'* to the *hetu* or the *dṛṣṭānta* would also be included in *adhika* (*parvato vahnimān dhumavattvādeḥ mahānasādivat*). (See NP., p. 201). *Adhika* would not be a fault in a *vāda*; and it would be an additional excellence in a *jalpa* when it has been decided to put forward a number of statements as proof. But a non-omniscient person or a person of average intelligence cannot make all possible statements, so there can be no rule recommending the statement of additional factors (NP., p. 201). The general rule is that one should not say anything that is not necessary (*anapekṣitaṁ na brūyāt*).

(13) *Punarukta* (repetition) is the re-statement of words or ideas, except when they are meant to be reproduced (*śabdārthayoḥ punarvacanaṁ punaruktam anyatrā'nuvādāt.* —NS., 5.2.14). For instance, *śabda* (sound) is not-eternal, *dhvani* (sound) is liable to destruction (*anityaḥ śabdaḥ, nirodhadharmakaḥ dhvaniḥ*). In the case of reproduction, it is not repetition, because in that case the re-statement serves an additional purpose. In this way, the re-statement of the *pratijñā* on the basis of the statement of the *hetu* (probans) constitutes the *nigamana* (final conclusion), which cannot on that ground be charged with being repetition. (*Anuvāde tv apunaruktaṁ śabdābhyāsād arthaviśeṣopapatteḥ*—NS., 5.2.15). Or when one wants to refute the argument of the opponent, one must reproduce what is intended to be refuted just to convey that one has clearly understood it and to put it specifically before the audience. It may be remarked that according to the *Nyāya-sūtra*, 5.2.16, even the actual statement by means of directly expressive words of what is already implied is *punarukta* (*Arthād āpannasya svaśabdena punarvacanam.* —NS., 5.2.16). For instance, after stating 'Word is non-eternal, because it has the character of being produced' (*śabdo'nityaḥ utpattidharmakatvād*), it is not necessary to state: 'Only that which does not have the character of being produced is eternal' (*anutpatti-dharmakaṁ nityaṁ*), because it is already

obtained by implication. 'Mountain is possessed of hot fire' is another instance. Uddyotakara says that some people hold that *punarukta* is not a *nigrahasthāna*, because no harm is done thereby to the process of investigation; on the contrary, repetition brings about greater conviction and easier comprehension. But this is not correct. There is no sense in this repetition involved in expressing what is already expressed. This element of superfluity makes it a *nigrahasthāna*, because it shows that the debater does not fully understand the real nature of the means that he has to adopt to prove the conclusion. Morever, he is neither the pupil nor the teacher, hence there is no point in expressing the same idea again and again [26]

V radarāja gives in his *Tārkikarakṣāsārasaṁgraha* a three-fold classification of *punarukta—śabdapunarukta, artha-punarukta* (repetition of the same idea) and *ākṣepapunarukta* (repetition in so many words of what is implied in a former expression). Varadarāja refers to the views of Viśvarūpa (author of a long-lost *Nyāyabhāṣyaṭīkā*) and Jayanta supporting the separate mention of the first variety. These authorities are said to hold the view that the repetition of words alone even if the senses are different is also censurable in a '*niyamakathā*' (*śabdapunaruktasya bhedena nirdeśo'py arthabhede'py uktaśabdo na punar vaktavya iti niyamakathāyāṁ śabdamātrapunaruktir api nigrahasthānam iti sūcayitum iti Viśvarūpa-Jayantāv iti*—p. 347). (See *Nyāyamañjarī*, II, p. 201ff). Varadarāja says that according to Viśvarūpa and others *punarukta* becomes a fault only in a '*niyamakathā*' (where it has been initially decided that there shall be no repetition) and not elsewhere.

Veṅkaṭanātha recognises two varieties of *punarukta*, viz, *artha-punarukta* (repetition of the same idea) and *ākṣepa-punarukta* (repetition in so many words of what is implied in a former statement). He does not admit *sabda-punarukta* (e.g. *śabdo nityaḥ, śabdo nityaḥ*) as a variety of *punarukta*, for if these have the same meaning, it is a case of *artha-punarukta*; and if they convey different meanings, then no

fault is involved. Morever repetition thrice is necessary even according to the rules of debate when the other party or the audience has not understood what the *vādin* has to say. Thus *śabda–punarukta* cannot be a distinct variety of *nigrahasthāna*; as a matter of fact, it is necessitated by circumstances (See NP., pp. 203–204).

The idea behind this *nigrahasthāna* is that one should not unnecessarily repeat what has already been stated or what can easily be understood by implication.

14–16 signify incompatibility with the right method of answering.

(14) If a debater fails to re-state even what has been stated by the other party three times, and duly understood by the audience, it is a case of *Ananubhāṣaṇa* (non-reproduction). (*Vijñātasya pariṣadā trir abhihitasyā'py apratyuccāraṇaṁ ananubhāṣanam.*—NS, 5.2.17). If he does not restate the position of the opponent, on the basis of what would he put forward his arguments against that position ? As Udayana says, though he does not understand it, he does not say so; if he did, it would be a case of *ajñāna* (incomprehension); nor does he desist from the discussion for if he did, it would be a case of *vikṣepa* (evasion), or breaking off. (*Vādinoktasya pariṣadāvabuddhasya punar vādinā pariṣadā vā anūdya dattasyā'pi yogya-svasthenā'navabodham anāviṣkurvatā kathām avicchindatā apratyuccāraṇaṁ ananubhāṣaṇam*—BS., p. 110). Varadarāja (12th cent.) says that only that much should be reproduced as is to be confuted or found fault with, and not all that the opponent has said, unless it has been fixed at the very beginning that the entire statement of the opponent would have to be reproduced. Nor is it necessary that it should be reproduced in the very words of the opponent, as even when the content is conveyed the purpose is served thereby.[27]

The Buddhist and the Jaina logicians object to this *nigrahasthāna* Since the business of a debater is to answer arguments, this should not be regarded as a *nigrahasthāna*.

Whether he is bewildered or not can be determined only by the efficiency or otherwise of the answer he gives. What then could be the use of reproducing what the opponent has said? Moreover, it may happen that a debater is able to answer perfectly the arguments of the opponent and yet may not be able to reproduce them; and certainly he does not on that account deserve to be regarded as liable to 'check'. In fact when a debater having propounded his thesis is unable to maintain it in debate, all that we can say is that he is inefficient, but this does not prove that his view is wrong.[28] As Vācaspati explains this objection, if a debater propounds a thesis, but is unable to maintain it in debate, though he is able to supply suitable answers to the opponent's strictures, all that this can show is that he is not strong enough to carry on a debate in the right way, which consists in reproducing the opponent's arguments and then confuting them; but it does not prove that the view propounded by him was wrong; thus mere non-reproduction (*ananubhāṣaṇa*) should not be regarded as a *nigrahasthāna*.[29]

Uddyotakara says that there is no force in this; it only shows that the one who raises such an objection does not uuderstand what the exact object of the answer is. As a matter of fact, if the debater does not re-state the opponent's arguments, his answer becomes objectless. If a debater does offer the right answer, why does he not re-state the arguments he answers one after the other? In fact, it is a contradiction in terms to say that he does not re-state the arguments and yet he answers them. Further, the objection is baseless as what is denied therein is not asserted at all. It is not laid down as a rule that one must first re-state the arguments and then answer them; the arguments may be answered in any way possible. What is meant however is that unless the debater reproduces the opponent's arguments, his answer in the absence of its right object would be an improper one, it is for this reason that reproduction is thought necessary, and *ananubhāṣaṇa* (non-reproduction) is regarded as a *nigrahasthāna*.[30]

Udayana says that *ananubhāṣaṇa* is five-fold according as the debater re-states by means of pronouns, 'As to that which you said', or reproduces only a part of what is to be confuted, or reproduces something else than what is to be answered, or reproduces wrongly (*viparītānuvāda*), or states only the confutation, or simply keeps quiet due to bewilderment (and not due to ignorance or lack of prompt answer as in the case of *ajñāna* and *apratibhā*). The first is a *nigraha-sthāna* only when the opponent has put forth more than one argument and so each argument needs to be specifically reproduced. Reproduction of what is redundant (*adhika*) or of a fallacious argument is included in *viparītānuvāda*.[31] It may be noted that if the *prativādin*, without understanding the *vādin*'s reasoning, tries to confute it by a *jāti*-type of argument, the *vādin* should not reproduce it, but only point out that the *prativādin* has not understood what he said, otherwise he himself would become liable to be 'checked'.

(15) When the statement is not comprehended, it is a case of *Ajñāna* (incomprehension) (*Avijñātaṁ cājñānam.*–NS., 5 2.18). When a statement has been understood by the assembly, and has been repeated by the opponent (or the assembly) three times, if a debater still fails to comprehend it, this is the *nigrahasthāna* called '*Ajñāna*'. Without understanding what the opponent has said, what could be refute ? Udayana says that in this case the man admits that he has not understood what the opponent said and hence remains quiet and this is its difference from *ananubhāṣaṇa* and *apratibhā* (lack of ready answer).

(16) It is a case of *Apratibhā* (lack of ready answer) when a debater does not know or find an answer (to the opponent's argument) (*uttarasyā'pratipattir apratibhā*—NS., 5.2.19). When a debater starts reciting stray verses or sets his hair right or does any such activity, thus showing that he does not pay attention to what the opponent has said, it only means that he does not know what to say by way of answer to him, and it is an instance of the

nigrahsthāna Apratibhā; it shows that the man is ignorant of the right answer. Udayana says that *apratibhā* can be urged or exposed only after the debater has reproduced the opponent's argument. This is not a case of *ajñāna* as one can never be sure of another's ignorance or incomprehension and here he does not admit his incomprehension of the opponent's argument (*anuvādānantaram evaitadudbhāvanāvasaraḥ, anyathā atiprasaṅgāt, tadā hi nā'jñānam udbhāvyaṁ sandigdhatvāt, svayaṃ anāviṣkārāc ca.*—BS., p. 113).

(17) When a debater breaks off the debate under the pretext of some work it is a case of *vikṣepa* (breaking off or evasion) (*kārya-vyāsaṅgāt kathā-vicchedo vikṣepaḥ*—NS. 5.2.20). When a debater puts forward the pretext of having to do something else and breaks off the debate saying, " I have got to do such and such a work, I shall resume the discussion after having finished the work", or on the pretext of trouble in the throat and the like, this is an instance of *vikṣepa*. Udayana says that chewing betel-leaf, spitting etc. are not of the category of excuses, for being regarded as necessary things to be done, they do not indicate any incompetency (see BS., p. 114).

18–20 bear upon flaws in the statements.

(18) If a debater admits the flaw in his own thesis and then urges the same in that of the opponent, it is a case of *Matānujñā* (confessing or admission of the contrary opinion) (*svapakṣe doṣābhyupagamāt parapakṣe doṣa-prasaṅgo matānujñā*—NS., 5.2.21). When a *vādin* without trying to show that his statement is free from the defect, urged against it by the opponent, simply says, " The same defect is found in your reasoning also", he admits the defect in his own view or reasoning and then tries to urge the same against the opponent. In doing so he admits the opinion of the other party regarding his view or reasoning, and thus becomes subject to a check. For instance, being charged with "You are a thief, because you are a man, " a man simply says,

" Then you also are the same ". Here he admit the defect in, himself and then urges it against the opponent. A man who does not admit the charge would say, " Being a man cannot be a reason for being a thief; what makes a thief is the possession of something belonging to another and not given away by him". Since in the former case the man shows that he does not know this right answer, he becomes subject to a 'check'.

Some argue that since the debater urges an undersirable contingency arising out of the opponent's statement, this cannot be a *nigrahasthāna*; he does not admit the presence of the said flaw in his own statement; all that he does is to point out that the same contingency arises out of the opponent's statement. This however is not right. It is just because he urges an undesirable contingency when he ought to have given an answer, that it is clear that he is ignorant of the right answer, and should therefore, be 'checked' (*Yata evā'yam uttare vaktavye prasaṅgaṁ karoti, tata evottarāparijñānān nigṛhyate iti.*—NV., 599).

(19) When a *vādin* has rendered himself subject to a 'check, if the *prativādin* fails to bring it home to him (by directly charging him with it), the *prativādin* becomes subject to the 'check' *Paryanuyojyopekṣaṇa* (overlooking the exceptionable) (*Nigrahasthāna-prāptasyā'nigrahaḥ paryanuyojyopekṣaṇam*—NS. 5.2 22). This *nigrahasthāna*, however, can be pointed out only by the assembly (*pariṣat*) when directly appealed to with the question, "Who is defeated ?" The man who had rendered himself open to a 'check' would not himself disclose his own weakness by saying "I had rendered myself subject to a 'check', and you failed to urge it against me".[32] But in a *vāda*, the debater would himself urge it against the opponent as there would be no president or members of the assembly. Udayana says that where a debater is subject to a member of 'checks', the application of one and not of all is not a case of *paryanuyojyopekṣaṇa*, as the purpose is served even by one 'check' (or exposure of one *nigrahasthāna*): otherwise the *prativādin* himself would be

subject to the check '*dūṣaṇādhika*'. But where it is agreed that all possible *nigrahasthānas* be exposed or urged, the non-exposure of any one of these would constitute the *nigraha-sthāna* '*paryanuyojyopekṣaṇa*'. (See BS., p. 118; VV., p. 36). Varadarāja says in his *Tārkikarakṣāsārasaṁgraha* (p. 356) that according to Viśvarūpa and Jayanta a *vādin* may clarify that he deliberately used a wrong argument in order to test the capability of his *prativādin* (opponent); but the opponent being a fool could not detect it, and the opponent therefore deserves censure. In *vāda-kathā*, the circumstance makes both the parties liable to censure and defeat, and the assembly becomes victorious In *jalpa* and *vitaṇḍā* where discomfiture of the other party is the sole aim, a *vādin* becomes victorious even by using the wrong means (Compare *Nyāya-mañjarī*, II, p. 205ff).

Veṅkaṭanātha says that according to some this *nigrahasthāna* can be exposed by the members; according to others it can be proudly exposed by the person himself who is liable to be subjected to the check by saying, 'To test him I deliberately put forward a fallacious argument; but fool as he is, he did not detect this'. Still others hold that since the members do not want to inflict defeat and since then it would be a cause, but not intentionally, of the partial defeat of the debater whose flaw was not exposed, and it is not ridiculous to confute another by exposing one's own faults, it is not a *nigrahasthāna* at all. As a matter of fact it is not always a *nigrahasthāna* in *jalpa* and *vitaṇḍā*; it only serves to expose the dullness of the members and president of the assembly. In a *vāda* this can be exposed by oneself or by the members; in either case it is useful for the determining of the truth; and the exposing of one's fault also is no fault (see NP., pp. 209–210; see also TR., pp. 354–356). Jayanta is of the view that *paryanuyojyopekṣaṇa* can be urged by the person himself who put forward the defective argument or by the judges (NM., II, p. 206).

The idea behind this *nigrahasthāna* is that one must not overlook a point of censure or defeat of the other party.

(20) When a *nigrahasthāna* is urged where there is no *nigrahasthāna*, it is a case of *Niranuyojyānuyoga* (finding fault with what is unexceptionable) (*Anigrahasthāne nigrahasthānābhiyogo niranuyojyānuyogaḥ*—NS., 5.2.23).

It is only when a debater has a wrong conception of the true character of a *nigrahasthāna* that he can urge 'You are defeated or checked' against the opponent, who in fact has not rendered himself subject to a 'check' and in doing so since he would be finding fault with one who does not deserve to be questioned or checked, he should be regarded as defeated. Vācaspati says that this is not the same as *apratibhā*, as in the latter the debater does not know what to say in answer, while in *niranuyojyānuyoga*, he says something by way of an answer which is not an answer at all; he detects and exposes a *nigrahasthāna* where there is none. Thus *niranuyojyānuyoga* includes all *jātis* (—and also all *chalas*, and *pratijñāhānyādyābhāsas* i.e. wrong detection of *nigrahasthāna* where there is none). The difference between this and *hetvābhāsa* lies in this that the *hetvābhāsa* when pointed out leads to the defeat of the propounder of the argument, i.e. the *vādin*, while *niranuyojyānuyoga* is urged against the *prativādin* who answers an argument and exposes a *nigrahasthāna* where there is none, and when urged it leads to his defeat.[33] The idea is that one should apply a 'check' only when there is ground for it.

Udayana says that *niranuyojyānuyoga* is fourfold—*chala*, *jāti*, *ābhāsa* (wrongly urging a *nigrahasthāna* where there is none) and *anavasaragrahaṇa* (urging of a *nigrahasthāna* before or after the proper time when it should be urged).[34] According to Veṅkaṭanātha *nigrahasthānābhāsa* can be of many kinds—imposing a *nigrahasthāna* where there is none; urging a particular *nigrahasthāna* where there is a different one, urging a *nigrahasthāna* which is not accepted as such in one's own

school of thought, urging a *nigrahasthāna* which is accepted as worthy of being forgiven or overlooked, and so on.[35] In a *vāda*, a *nigrahasthāna* can be urged even after the proper occasion for it, if it contributes to the understanding of truth.

(21) Having accepted one stand-point or theory, if a debater carries on the discussion without restriction it is a case of *Apasiddhānta* (inconsistency) (*Siddhāntam abhyupetyā'niyamāt kathāprasaṅgo'pasiddhāntaḥ*—NS., 5.2.24). For instance, the Sāṁkhya view is that an entity never renounces itself, there can be no destruction of what is existent, and that which is non-existent can never come into existence, no non-existent thing is ever produced. Having taken this stand, a *vādin* goes on to establish this thesis in the following manner: "All that is manifested must be regarded as emanating from a single origin, because there is a common character or substratum running through all emanations. As in the case of the earthen cup and the like it is found that they have the substratum of clay or earth running through them all, and are emanations from a single origin, so all manifested things are found to have pleasure, pain and delusion running through them all, and seeing the substance of this common substratum, we conclude that the whole of the universe must be an emanation from a single origin." At this stage the opponent questions him as to how it is to be determined that a certain thing is the basic substance (*prakṛti*) and another an emanation (*vikāra*). Thus questioned, the Sāṁkhya answers, "That which itself remains constant while one character of it ceases to exist and another comes into existence, is the *prakṛti*; and the character that ceases to exist and comes into existence is the *vikāra*". Here we find that the Sāṁkhya has given up his stand, and while discussing his argument is even contrary to the opinion accepted before. At the outset he held that the non-existent can never come into existence, and the existent cannot cease to exist. Now it is a well known fact that unless there is 'cessation of existence' of what was existent, or 'coming into existence' of what

was non-existent, there can be no disappearance (*tirobhāva*) or appearance (*āvirbhāva*). For instance, when the clay remaining constant, a character in the shape of cup comes into existence it is said to appear, and when it ceases to exist it is said to disappear. All this should not be possible according to the Sāṁkhya stand-point. Having urged all this against him, if the *Sāṁkhya-vādin* comes to admit that what is existent does cease to exist and what is non-existent does come into existence, then he becomes subject to the check '*apasiddhānta*'; while if he does not admit the said facts his thesis fails to be established.

It may be remarked that if a *vādin* contradicts his proposition, he is open to the charge of *pratijñā-virodha*; in the case of *apasiddhānta*, what he says in the course of the debate is not the contrary of the proposition itself, but of something else, of some theory or doctrine which he may have accepted in the course of the discussion. That is to say, a debater must resort only to that theory which he has accepted from the outset.

The urging of *hetvābhāsa*, *apasiddhānta* and *niranuyojyānuyoga* brings an end to the debate.

(22) *Hetvābhāsas*—also are *nigrahasthānas* as they are described in the *Nyāya-sūtra* 1.2. 4–9, that is to say, in the same forms in which they have been classified. We shall treat *hetvābhāsas* in a separate chapter. The urging of *hetvābhāsa* brings an end to the debate.

Udayana says that '*ca*' in the *sūtra* '*hetvābhāsāś ca yathoktāḥ*' (NS., 5.2 25) comprehends also the *dṛṣṭāntābhāsas* (fallacies of illustration), *tarkābhāsas* (fallacies of *tarka* like *ātmāśrayābhāsa* etc.) and the cases where the relation of invariable concomitance is not stated or wrongly stated—these being fallacies of statement (*uktito yathā anupadarśitānvaya-viparyayopadarśitānvayādi* — BS., p. 125). These are not specifically mentioned as they are only further elaborations of *hetvābhāsas* (fallacies of probans) (See BS, pp. 125-126). As

Śaṅkara Miśra says, according to Udayana, though these are included in *hetvābhāsas* they should be exposed by their own names, and not simply as *hetvābhāsas*; whereas others regard these as independent faults or faults in their own capacity (*ete svatantrā eva doṣāś ca-śabda-samuccitāḥ nigrahasthāna-tvena boddhavyā ity anye.*—VV., p. 37).

Nigrahasthānas are classified into the following three divisions by Viśvanātha, though others also before him had this classification in their minds :

(*i*) *Anuktagrāhya*, those which accrue or are exposed on account of not speaking—*ajñāna*, *ananubhāṣaṇa*, and *apratibhā* (3);

(*ii*) *Ucyamānagrāhya*, those which are exposed even while the person is speaking—*aprāptakāla*, *arthāntara*, *nirarthaka*, *apārthaka* (4);

(*iii*) *Uktagrāhya*, those which are detected after the argument has been stated or the answer given—*pratijñā-hāni*, *pratijñā-ntara*, *pratijñā-virodha*, *pratijñā-sannyāsa*, *hetvantara*, *avijñātārtha*, *vikṣepa*, *matānujñā*, *nyūna*, *adhika*, *punarukta*, *niranuyojyānuyoga*, *apasiddhānta* (13).

Exposing any of these twenty *nigrahasthānas*, the debaters can defeat each other. When it is not possible to apply any of these checks, each party tries to expose the fallacy of probans (*hetvābhāsa*) in the other party's statement. But it is not given to either the proponent or the opponent to urge the *nigrahasthāna* called *paryanuyojyopekṣaṇa* (ignoring the exceptionable); only the judges can expose this *nigrahasthāna* for no party would disclose the weak point in one's own argument.[36]

Coming to the Buddhist view regarding *nigrahasthānas* we may say that the treatment of *nigrahasthānas* is not quite thorough and systematic in the *Upāyahṛdaya*. Tucci remarks in his Notes on the *Upāyahṛdaya* that the treatment of *nigraha-sthānas* concerned with *pratijñā* shows signs of confusion, and

it seems that the Chinese translators were not quite sure in their renderings of the technical terms (see UH., Chapters 2 and 3). It seems that the *nigrahasthānas* are supposed to be divided into three groups according as they refer to the *vākya* (statement i.e. *sthāpanā*, proof, or *pratijñā*, proposition), the *hetu* and the *dṛṣṭānta* which are wrongly formulated (*Nanu kiṁ vacanaṁ dūṣayitavyaṁ ucyate. vākya-vaiparītyaṁ, asaddhetu-sthāpanaṁ udāharaṇa-vaiṣamyaṁ ca tad dūṣayitavyam.*—UH., p. 19). *Adhika* and *Nyūna* which are enumerated among the *vākya-doṣas* are similarly classified (see UH., pp. 10–11). A statement is said to be perfect if it is not contrary to reasoning (*yuktyaviruddha*), not redundant (*anadhika*), not deficient (*anyūna*), if the meaning of the words in it can be understood (even by ordinary persons) (*adhigata-padārtham*), if it possesses the necessary characteristics of a statement (*vacanadharma-nibaddha*), if it is not contrary to a well known example (*prasiddha-dṛṣṭāntāviruddha*), and if it is unexceptionable (*ananuyojya*). The reverse of these constitute the faults of a statement, viz. *yuktiviruddha, adhika, nyūna, anadhigata-padārtha, vacanadharmānibaddha, dṛṣṭānta-viruddha, anuyojya.* Moreover, faults of a statement can be two-fold according as the same statement is uttered or the same meaning conveyed more than once without there being any reason for this (*punarukti—vākya-punarukti, arthapunarukti*). Ornateness and inconsistency (*asaṅgati*) are also faults of a statement. These correspond to *avijñātārtha and apārthaka.* Moreover, a statement is said to be faulty if even though it gives expression to correct reasoning, the accepted order of the members of the syllogism is not maintained (*akramam*). This corresponds to *aprāptakāla.*[37]

Vāk-chala, sāmānya-chala, saṁśaya-sama, kālātīta, prakaraṇasama, varṇyasama, savyabhicāra, viruddha (contradicted by example and by *yukti* which here signifies logical and and right doctrines and views laid down by the scriptures etc. —see UH., p. 17), are grouped together as *hetvābhāsas.*[38] *Kālātīta* of *Upāyahṛdaya* corresponds more to Caraka's *atītakāla*, proving the *hetu* after it has been adduced to prove

something. For example, "*Veda* is eternal, because it is constituted of *śabda* (word)." Here the opponent raises an objection that as yet the *vādin* has not proved *śabda* to be eternal. On this the *vādin* says, "As *ākāśa* being colourless is eternal, so word is eternal because it is colourless." This is like going in search of water when the house is already burnt by fire.[39]

The *Upāyahṛdaya* further mentions *anuyojyānanuyoga*, *prativaktavye'prativaktavyatā* (corresponding to *apratibhā*), *avijñātam* (corresponding to *avijñātārtha*), *avijñāna* (=*ajñāna*), *ananuyojyānuyoga*, *ananubhāṣaṇa* (See UH, p. 19). The *vākyadoṣas*—*nyūna*, *adhika*, *nirarthaka* (=*apārthaka*) *aprāptakāla*, *punarukta*, *pratijñā-sannyāsa*—are also to be regarded as *nigrahasthānas* (see UH., p. 20). There is, as said above, some confusion in the treatment of *nigrahasthānas* concerned with *pratijñā*, yet the *Upāyahṛdaya* can be said to recognise substantially *pratijñā-hāni*, *pratijñā sannyāsa*, *pratijñāntara* and *pratijñā-virodha*. *Matānujñā* is included in the illustration of *ṣaṭpakṣī kathā* (controversy having six stages) (see UH., p. 24).

It can be said that the treatment of *nigrahasthāna* is of a very preliminary character; only the characteristics of some *nigrahasthānas* are mentioned, and not their names; at times the cases of 'check' which are included in one in the *Nyāyasūtra* are described separately. *Hetvantara*, *arthāntara*, *nirarthaka*, *vikṣepa* and *apasiddhānta* do not seem to be explicitly mentioned.

The *Tarkaśāstra* mentions the same twenty-two *nigrahasthānas* as are recognised by the *Nyāyasūtra* (see *Tarka-śāstra*, Chapter 3, pp. 33-40).

The *Yogacaryābhūmiśāstra* of Maitreya (or Asaṅga) and *Prakaraṇāryavācāśāstra* (which may be grouped together) classify *nigrahasthānas* into three divisions :

(a) *Vacanasannyāsa* consists in confessing one's own defeat and in acknowledging that the thesis of the opponent is right (—corresponding to *pratijñā-sannyāsa*);

(*b*) *Vacanābhibhava* (failure of speech or statement) occurs when a speaker realising that his arguments are wrong, tries to avoid the discussion by saying that he has something else to do (—corresponding to *vikṣepa*—), or brings into the discussion new arguments not connected with the previous ones (—*arthāntara*—), or looks irritated, angry, conceited or discloses some defect or fault of the opponent which the latter does not like to have disclosed, or looks offended, or shows impatience or distrust and has nothing to say by way of an answer and therefore keeps silent, or looks abashed and trembling, or bends his head, or appears as if he were deprived of the faculty of thinking and speaking (—corresponding to *apratibhā*)

(*c*) *Vacanudoṣa* (erroneous speech) can be of nine kinds : (*i*) speaking at random, (*ii*) violent expressions of anger etc, (*iii*) obscurity of expression, when the speaker cannot be understood either by the assembly or by the opponent (*avijñātārtha*). (*iv*) lack of proportion, when the expression is either defective or excessive (=*nyūna*, *adhika*), (*v*) meaningless, *vyartha*—it is of ten kinds : (*a*) *anarthaka*, (*b*) *apārthaka*, (*c*) *yukti-hāni*, (*d*) *sādhya-sama*, (*e*) *jāti*, (*f*) *arthānupalabdhi*, (g) *asambaddha* (*h*) *aniścita* (*i*) *siddha-sādhya*, when the probandum is an established fact, (*j*) speech according to illogical or wrong doctrines (—Compare *yukti-viruddha*, *śāstra-samaya-viruddha*). Sthiramati, in his commentary on the *Mahāyānābhidharmasaṅgītiśāstra* recognises only the first five of these ten and he considers the other five as mere explanations of them ($1 \lessdot 6$, $2 \lessdot 7$, $3 \lessdot 8$, $4 \lessdot 9$, $5 \lessdot 10$); (*vi*) *aprāptakāla*, when the various arguments are not put forward in the proper order (—Compare *atītakāla* of Caraka and *Kālātīta of Upāyahṛdaya*); (*vii*) *aniścita* or *aniyata*—when someone either attacks an argument that he has already established as his thesis, or establishes as a thesis an argument that he has already attacked, or suddenly changes his ideas (—Compare *pratijñāntara*, *pratijñā-virodha*); (*viii*) obscurity, (*ix*) lack of cohesion.[40]

Dinnāga (420 A.D.) dropped the section on *Nigraha-sthāna* altogether on the ground that it includes either such points as must be formulated in a refutatory syllogism or are quite irrelevant. "Moreover as regards that which has been said by the ancient masters on logic concerning the points of defeat (*nigrahasthāna*), (these are arguments, that) fall into (the number of) inferences included among (the cases in which) a refutation (must be formulated), or that are rough or illogical; since these arguments are analogous to quibble (*chala*) they are not mentioned here."[41]

It was Dharmakīrti who did some fresh and original thinking with regard to *nigrahasthānas* in his *Vādanyāya*. The writers of books on Nyāya admitted a net-work of *nigraha-sthānas;* but Dharmakīrti, perhaps for the first time, simplified things by recognising only two—*asādhanāṅga-vacana* (statement of what is non-essential by way of proof or non-statement of what is essential for proof) and *adoṣodbhāvana* (exposure of a non-existing defect or non-exposure of an existing defect). These are the occasions of censure or the grounds of defeat of the *vādin* (proponent) and the *prativādin* (opponent) respectively. Other cases, according to Dharmakīrti, are not legitimate ones and as such are not to be deemed *nigrahasthānas.*

(*Asādhanāṅgavacanam adoṣodbhavānaṁ dvayoḥ,*
nigrahasthānam anyat tu na yuktam iti neṣyate.—

VN., 1. This is quoted and refuted in *Tātparya Ṭīkā, Nyāya-mañjarī* and other works, both Vedic and Jaina).

The terms *asādhanāṅgavacana and adoṣodbhāvana* can be interpreted variously as Dharmakīrti himself has shown. *Sādhana* (understood in the sense of an act) means proving and *aṅga*, necessary condition of it, is the three-fold probans (based on identity, causality – i.e an effect, or non-apprehension), and non-statement of it consists either in the maintaining of silence on account of not finding an answer or

nervousness, or in the non-competency of the probans to prove the thesis, such an incompetent probans being as good as unstated. A probans is said to be competent, when on its concomitance with the probandum being established, it is capable of proving the presence of the probandum in the subject. This is a *nigrahasthāna* for the *vādin* (*Asādhanāṅga-vacana=sadhanāṅga+avacana*–Non-statement of the probans which is a necessary condition of proof)[42]

Or *sādhana* means the instrument, the aggregate statement of the probans with the triple characteristic; its *aṅga*, component factor is the statement of its presence in the subject and presence in homogeneous cases only or absence alone in heterogeneous cases. Non-statement of any one of these is a *nigrahasthāna* for the *vādin*, because non-statement of any of these is as good as the non-statement of the very probans and consequently the not establishing of the thesis. (*Sādhanāṅga+avacana*).[43]

Or the term can mean statement of the non-component factors of the proof, e g *pratijñā* (proposition), *upanaya* (application), *nigamana* (conclusion) and so forth in the argument. This is a *nigrahasthāna* for the *vādin* as there is statement of what is not essential (*asādhanāṅga+vacana*). The Buddhists, as is known, recognise only two factors of a syllogism, preferably *dṛṣṭānta*, and *upanaya*.[44] Or the expression means the express statement of concomitance in absence (*vyatireka*) subsequently to the statement of the probans with concomitance in presence (*anvaya*), or the express statement of the positive concomitance subsequent to the statement of the negative concomitance, though even one would suffice to prove the thesis, and when any one of them is known by implication from the other and so its statement is not an essential condition of inference. The statement of such a non-essential condition is a *nigrahasthāna* for the *vādin* as it is a superfluous statement (*asādhanāṅga+vacana*).[45] Or the statement of a fallacious probans—*asiddha* (unreal or unestablished) *viruddha* (contrary), *anaikāntika* (inconclusive)—which is not

an instrument of proof, is a *nigrahasthāna* for the *vādin*, since what is not competent is included in the argument. Similarly, the inclusion of fallacious illustrations also is a *nigrahasthāna* since these do not serve to show the relation of the probans with the probandum and as such are incompetent [46]

The essential conditions of an argument are only such matters as are essential for proving the matter under dispute. The statement of matters other than these on the pretext of their being propounded by a particular system—matters which are not desired to be known by the other party—this statement being meant just to confuse the other party and not being an essential condition of inference, is a *nigrahasthāna* for the *vādin* as it is a statement of irrelevant things. Such statements only serve to break the link of the controversy. For instance "We, the Buddhists, say 'there is no soul', the Buddhist are followers of the Buddha, whose fold Aśvaghoṣa joined; Aśvaghoṣa is the author of a play called *Rāṣṭrapāla*, this play starts in a particulur manner, and so on." Such a *vādin* would even sing and dance in continuation of his talk. Such irrelevent digression leaves no scope for discussion and does not help the parties to come to any conclusion. Such useless talk is indulged in with the idea that the *prativādin* would naturally not be in a position to reproduce all this and would consequently be declared defeated. Such a procedure is adopted only to conceal one's weakness, but never by truthful persons. If the *prativādin* is alert enough to point out this drawback in the argument, the *vādin* is defeated. If he does not expose it, victory or defeat belongs to neither.[47]

The expression '*adoṣodbhāvana*' also can be explained in different ways. If after the *vādin* has adduced proof in support of his own thesis, the *prativādin*, who has a counter-thesis to pit against the thesis of the *vādin*, does not expose the flaw in the argument of the *vādin*, he should be declared defeated. The faults of reasoning are *nyūnatva* (deficiency),

asiddhatva (unreality), *anaikāntikatā* (inconclusiveness), proving just the opposite of what is desired to be proved (*viruddha*), and the fallacies of illustration. If the *prativādin* does not expose these, does not point out the defect in the argument of the *vādin*, this is a *nigrahasthāna* (ground of defeat) for him, as this can happen only when the reasoning of the *vādin* is faultless, or even though it is faulty, the *prativādin* cannot discover the defect owing to his ignorance or because he is not able to give an exposition of it. It is not proper to say that if the reasoning of the *vādin* is faulty, he can be said to be defeated even when the *prativādin* does not expose the defect in his argument. Only, such a *vādin* cannot be said to achieve victory as he has not proved his case. Defeat, it may be noted, does not follow merely on the failure to prove one's thesis or the truth; it follow only when one party's reasoning has been refuted by the other party. Thus even the *vādin* whose reasoning is not competent to prove his thesis should not be declared defeated if the *prativādin* does not lay his finger on this defect. But failure to expose this defeat is certainly a *nigrahasthāna* for the opponent * (*doṣa+anudbhāvana*).[48]

Or '*adoṣodbhāvana*' can mean the exposure of what is not a real defeat, or the exposure of inconsequential defects which do not disturb the main thesis (*adoṣa+udbhāvana*). Both these are legitimate *nigrahasthānas* for the *prativādin*, *Adoṣodbhāvana* would cover all varieties of *jāti* or sophistical refutation. If the *prativādin* tries to expose non-existent defects and the *vādin* establishes that these are no defects at all, the *prativādin* should be declared defeated since the reasoning of the *vādin* is faultless. And even if it is faulty due to the presence of some other defect, neither of them can be said to be victorious or defeated inasmuch as one has not established his thesis and the other instead of alleging a

* According to the Nyāya school, the judges would disclose this failure to expose the defects in the *vādin*'s reasoning as the *vādin* would not himself lay bare his own failing.

fault really present in the argument has tried to expose a non-existing defect. If a thesis is established and there is no counter-thesis pitted against it, the *vādin* becomes victorious. Therefore, one desirous of victory should establish his own thesis and also confute the argument of his opponent. Even when the *vādin*'s argument is faultless, if the *prativādin* urges an apparent but really non-existent defect in it, the *vādin* can be said to be victorious and the *prativādin* defeated only when the *vādin* has proved that the defect is not present and that his own reasoning is faultless; otherwise, he merely discloses his own incompetency to prove his thesis, and the *prativādin* also cannot be said to have been victorious as he has wrong knowledge of defects.[49]

Thus there are only two *nigrahasthānas*—*asādhanāṅga-vacana* and *adoṣodbhāvana* for the *vādin* and the *prativādin* respectively.

Dharmakīrti has refuted all the twenty-two *nigrahasthānas* as recognised by the Nyāya school and tried to show that they are misnomers and can ultimately be reduced to *asādhanāṅga-vacana* or *adoṣodbhāvana* or to some *hetvābhāsa* (which is included in the former) or that the Naiyāyika has described many irrelevant items which have no bearing upon the logical character of reasoning. For instance, what sane person would give up his thesis that 'word (*śabda*) is non-eternal because it is perceptible by the senses, like jar' and accept the counter-thesis that 'word is eternal', simply because the opponent brings in the irrelevant illustration of *sāmānya* (universal) which is perceptible by the senses and is eternal? It can be clearly seen that the reason 'because it is perceptible by the senses' is inconclusive (*anaikāntika*) being present in eternal as well as non-eternal things, and therefore an *asādhanāṅga*, not an essential means of proof. Its statement would naturally be a *nigrahasthāna* for the *vādin*. Thus what is known as *pratijñā-hāni* is really *asādhanāṅga-vacana*.[50]

For the Jaina logician, victory (*jaya*) consists in the establishing of one's own thesis and defeat (*parājaya*) in the

failure to prove one's thesis, '*Nigraha*' signifies this very defeat and not anything like execution or imprisonment or the like. Or that defeat alone consisting in the failure to establish one's position is called '*nigraha*' figuratively because it is the ground of *nigraha*. but it cannot be anything else as propounded by others, viz. the Brahmanical Naiyāyikas and the Buddhist logicians. The definition of *nigrahasthāna* 'ground of *nigraha*' given by the author of the *Nyāya-sūtra* viz 'misapprehension or want of apprehension' (*vipratipatty-apratipattimātram*—See NS., 1.2.19) is not correct in the opinion of the Jaina logicians. Merely these cannot constitute a *nigrahasthāna*. Misapprehension is apprehension or under-standing which is perverted, vitiated and worthy of condem-nation. It consists in regarding an invalid probans as a valid one, and a false refutation as a real one. As regards 'lack of apprehension', it consists in the failure to accomplish what is to be accomplished, e.g. the failure to refute the probans employed by the opponent and the failure to refute the objection raised against one's own reasoning. It is held by the Naiyāyikas that a debater is defeated in either way, viz. when he fails to attend to what is to be done or resorts to the opposite course. But mere misapprehension or the lack of apprehension cannot be a *nigrahasthāna* (ground of defeat). On the contrary, the failure to prove one's own thesis alone is the cause of defeat. The twenty-two varieties of *nigraha-sthāna* as given by the Naiyāyikas are thus repudiated.[51]

The Jaina logicians have also criticised the two *nigraha-sthānas* recognised by Dharmakīrti viz. *asādhanāṅga-vacana* and *adoṣodbhāvana*. The idea behind these is that the statement of what is not an essential factor of inference, or the non-statement of an essential factor, and the exposure of a defect that does not really exist in the other party's argument, or the non-exposure of a defect that is really present there—these constitute *nigrahasthānas* (grounds of defeat). The Jaina logicians say that defeat consists in the failure to establish one's thesis alone, and not in these. The Jaina logicians would

ask the Buddhist, " Does one party inflict defeat on another on the ground of these after having established its own thesis or not having done so ? " In the former case, the defeat of the other party is secured by the very fact that this party has established its own thesis, and exposure of a defect in the other party's argument is superfluous. In the latter case, even the exposure or the non-exposure of defects will not lead to the victory of either party as both parties have failed to prove their respective thesis. Further, what is regarded as essential for inference by one party, say the Naiyāyika (e.g. five members of a syllogism) may be regarded as non-essential by the other, say the Buddhist who recognises only two members of syllogism. Again, the express statement of negative concomitance (*vyatireka-vyāpti*) subsequent to the statement of the probans with positive concomitance (*anvaya-vyāpti*) and vice versa cannot serve as *nigrahasthāna* as involving tautology as the Buddhist would have it. Does such a person employing this double method become liable to defeat (or 'check') when he proves his thesis on the strength of a valid probans, or when he does not prove it ? In the former case, he cannot be said to be defeated even when he has proved his thesis simply because he is seen to make a superfluous or redundant statement which has no necessary bearing on the deduction of the conclusion, as this does not involve contradiction of the conclusion otherwise independently arrived at. The Jaina logicians say that they see no reason for offence even if a person digresses a little after he has established his thesis, as this is not something unusual in the world. If one insists on unnecessary and rigid formality, the person who adduces a sound probans and proves his thesis should be declared defeated even if he indulges in such innocent diversions as chewing betel-nut or twitching the eye-brow or waving the hand and so on.

It has been argued that victory and defeat do not depend on the proof of one's thesis and the failure of such proof, respectively, but they depend upon the knowledge (e.g. of

what is just essential proof or a real defect and so on), and want of it as is disclosed in the employing of non-essential factors or the non-employment of essential factors and the like. Even here if the person has proved his thesis by putting forth a sound reason or argument, he cannot be charged with ignorance of a sound probans, when as a matter of fact he lacks just the knowledge of the number of factors regarded as necessary for a syllogism by different schools Even if the person has not proved his thesis due to his probans being fallacious, the opponent (*prativādin*) who tries to inflict defeat on him on the score of *adhika* (redundant statement) cannot be said to have thorough knowledge of a refutatory argument as he does not expose the fallacy in the reason advanced by the *vādin*. He is aware of the fault of redundant statement (*adhika*) but ignorant of the fallacious reason (*hetvābhāsa*). In the circumstances, he cannot be supposed to have defeated the *vādin* completely, as he has proved his inability to avert the *nigraha* involved in the failure to expose the defect present in the *vādin's* reasoning. Further, if knowledge and the want of it be the criterion of victory and defeat respectively, the advocacy of the thesis and the counter-thesis by the *vādin* and the *prativādin* respectively could not be exempted from the charge of futility, in view of the fact that there must be present the knowledge or the ignorance of the competency of the probans in one position or the other. Therefore, instead of recognising any such criteria as the Naiyāyikas and the Buddhists suggest, it is better to say, according to the Jaina logicians, that victory accrues from the establishing of one's own position and defeat from the failure to do so. Such a view does not make the advocacy of a thesis and its counterthesis, i.e. a debate a futility.[52]

Dharmakīrti's criticism of the different varieties of *nigraha-sthānas* in his *Vāda-nyāya* has been a source of inspiration and guidance to the Jaina logicians. This proves interesting reading. They also have tried to reduce the *nigrahasthānas* to some kind of *hetvābhāsa* or shown the futility of these

checks till it is considered whether one has proved one's thesis or not. Many *nigrahasthānas*, moreover, from among these are subsumed under one variety,—for example, *avijñātārtha*, *apārthaka*, *aprāptakala* and *punarukta* under *nirarthaka* —of course only after doing proper justice to the motive of the person who is charged with these (See PM. *Vṛtti*, pp. 65–72). Regarding *hetvābhāsas*, the Jaina logicians observe that a *hetvābhāsa* constitutes a legitimate *nigrahasthāna* when the *prativādin* urges the fallacy of contrary reason (*viruddha*) in the *vādin*'s argument and thus succeeds automatically in establishing the opposite thesis—his own view. As regards the detection of the other fallacies such as *asiddha*, etc. it can be regarded as a legitimate *nigrahasthāna* only when the opponent has esablished his own thesis independently, not otherwise. The only criterion for a valid *hetu* (probans) is invariable concomitance with the probandum, or rather incompatibility with the opposite, that is to say, its presence not being possible when the probandum is not present (*anyathānupapannatva*). Any probans lacking this character is a fallacious one and its detection by the opponent can serve as a *nigrahasthāna* only if the opponent has himself proved his own thesis.[53] On the whole, it may be said, the Jainas appreciate the application of these 'checks', but for them the main criterion is whether the debaters have proved their respective thesis or not, when the different *nigrahasthānas* can be regarded as legitimate only if they really come in the way of the proving of the thesis.

Jaya-parājaya-vyavasthā

The position as regards the determination of victory and defeat (*jaya-parājaya-vyavasthā*) in the Nyāya, the Buddhist and the Jaina schools, would be something like this that according to the Nyāya school, a person who establishes his view by the strictly logical method, even without employing *chala*, etc. can be checked and defeated by the opponent on account of such minor drawbacks as repetition, or non-reproduction of the opponent's argument, or some irrelevant

point discussed or the like, though these are in a sense extraneous conditions not affecting the establishing of his thesis. The Buddhist logicians prohibit or rather discourage the employment of *chala*, etc., yet, according to them, a person is liable to a 'check' or is defeated if he states anything that is not strictly essential for proving his thesis, or if he does not detect a flaw if there is any in the argument of the opponent, or if he exposes a flaw not really present in the opponent's argument. Of course, this happens when the opponent points out this failing. By *asādhanāṅga*, non-essential factor, is meant everything irrelevant to the proving of the main thesis.

These restrictions and rules may lead to a circumstance where the *vādin* employs a fallacious reason to prove his thesis and the *prativādin* instead of exposing the real flaw exposes other non-existent flaws or defects. Taking advantage of this, the *vādin* defends himself by pointing out that the confutation is a futile one, and thus the *vādin*, even though he has not been able to prove his thesis, can defeat his opponent on the ground that he has indulged in the exposure of non-existent defects. The *vādin* will not of course be declared victorious, but he will not also be pronounced defeated. We may nevertheless rely on the judgement of the *sabhyas* and the *sabhāpati* if they are really intelligent and honest persons. It may also happen that the *vādin's* reasoning is valid, still the tricky opponent urges some non-existent defect and the *vādin* does not answer this objection of his. In such circumstances neither is declared victorious or defeated. The Jaina logicians would say, on the ground of their criteria of victory and defeat, viz. establishment of one's thesis and refutation of the counter-thesis, and the failure to do so, that in the former case if the *prativādin* is pronounced defeated on account of his futile refutation, the *vādin* also should be pronounced defeated because he has not been able to prove his thesis. In the Jaina view, the establishment by one party of its thesis is equivalent to the failure of the other party to establish the counter-thesis. Thus the establishing of one's thesis is the main ground for

victory and the failure to do so is the ground of defeat. Victory of one party invariably implies the defeat of the other party. Redundant, or deficient statement, digression and the like are insignificant so long as the thesis is proved and should not then be admitted as criteria of censure or defeat as the matter becomes confused thereby. The Jaina logicians say that one may even dance after establishing his thesis, and such petty factors though irrelevant to the main point should not come in the way of the achievement of victory, for all this is a part of worldly behaviour which cannot be denied or prohibited so long as it does not affect the point at issue.[54] We have seen that the later Naiyāyikas, especially Udayana, tried to reinterpret the *nigrahasthānas* in the light of the criticism by Dharmakīrti and the Jaina logicians.

Though in actual practice there would not be in essence much difference on account of the different positions of these schools, yet it can be said that the Jaina point of view takes into consideration mainly the central idea of the establishment of one's own thesis and the consequent refutation of the opponent's thesis, and does not allow the issue to be unnecessarily confused by other formalities, though it recognises these as leading to defeat or censure when they obstruct the establishment of the thesis. The Brahmanical and the Buddhist logicians, especially the former, take into consideration other extraneous factors also which might intrude into a debate, in addition to the main purpose of proving one's thesis and refuting the opponent's. Both may have had their justification in the actual practice of the debate. The Brahmanical Naiyāyikas would not tolerate in a debate such things as useless repetition, digression, etc. and are what may be called sticklers in respect of form and procedure of debate, while the Jaina logicians would object to taking formalities into consideration when the main purpose of the debate, viz. the establishment of the thesis, is achieved.

We may finally note briefly the view of Jayatīrtha of the Madhva school. He recognises only six *nigrahasthānaṣ*, viz.

virodha (contradiction or opposition), *asangati* (inconsistency), *nyūna* (deficiency), *adhika* (redundancy), *saṁvāda* (accepting the opponent's thesis), *anukti* (non-statement of what should be stated for convincing others). The first four are faults of reasoning or argument (*upapatti-doṣa*); and these along with *saṁvāda* and *anukti* comprehend all the *nigrahasthānas* admitted by the Nyāya school. *Virodha* and *asangati* are directly faults of reasoning (*upapatti-doṣa*), that is to say, of content (*artha-doṣa*) and indirectly of statement or expression, whereas *nyūna* and *adhika* are directly faults of expression (*vacana-doṣa*) and indirectly of content. '*Virodha*' signifies absence of compatibility of sense (*yogyatābhāva*), and '*asangati*' absence of expectancy (*ākāṅkṣā-virodha*). Statement of only a part of what should have been fully stated constitutes '*nyūna*', and the statement of what is certainly expected, but whose function is already served by another, constitutes '*adhika*'. These are twofold according as they pertain to inference proper or are common to debate and these four along with *saṁvāda* (admitting the opponent's thesis) and *anukti* (non-statement of what is essential) (—these two being faults of the speaker—) constitute the six *nigrahasthānas* in debate.[55]

Jayatīrtha shows how all the twenty-two *nigrahasthānas* of the Nyāya school can be included in these: (1) *Pratijñā-hāni* (in which, according to one view, the *vādin* glves up his position)=*saṁvāda*. (2) *Pratijñāntara*—Here a new proposition is put forward, so it cannot be said to be the continuation of the same debate, nor can it be said to be a new debate, as then this would cease to be a *nigrahasthāna*. This proposition is not at all expected or required, there is no *ākāṅkṣā* for it, so it is a case of *asangati*, and not pertaining to debate, it is not a *nigrahasthāna*. (3) *Pratijñā-virodha* (opposition of sentences or words in a sentence)=*virodha* (or *sva-vacana-virodha*, a sub-variety of *virodha*). (4) *Pratijñā-sannyāsa* =*virodha* (of the type of *pramāṇa-virodha*—opposition by sources of valid knowledge). (5) *Hetvantara* can be included in *pratijñāntara*, so=*asangati*. (6) *Arthāntara*=*asangati*. (7) *Nirarthaka*

=*anukti*. (8) *Avijñātārtha*=*anukti*. (9) *Apārthaka*=*asaṅgati*. (10) *Aprāptakāla* is really not a *nigrahasthāna* but if it be at all regarded as one, it would be included in *asaṅgati*. (11) *Nyūna*=*nyūna*; (12) *Adhika*=*adhika*; (13) *Punarukta*=*adhika*. (14) *Ananubhāṣaṇa* is of five kinds (as explained above)— reference to what was stated by pronouns, reproducing a part of what is to be confuted, stating only the refutation, reproducing wrongly, and remaining silent. The first three=*nyūna*, the fourth=*asaṅgati*, the fifth=*anukti* (15-17) *Ajñāna*, *Apratibhā*, *Vikṣepa*=*anukti*. (18) *Matānujñā*=*asaṅgati*. (19) *Paryanuyojyopekṣaṇa*=*anukti*. (20) *Niranuyojyānuyoga* is four-fold—*chala*, *jāti*, *hānyādyābhāsa*, and *aprāptakāle grahaṇam*. Of these *chala* can be included in *asaṅgati* or *virodha* of the *svanyāya-virodha* type where the same objection could apply to one's own statement also, and a different meaning could be imposed on the *chalavādin*'s statement too; *jāti* too with its twenty-four varieties involves *svanyāyavirodha* (as shown in the chapter on *chala* and *jāti*). *Pratijñāhānyādyābhāsa* = *virodha* of the *pramāṇa-virodha* type as these *ābhāsas* are opposed by the authoritative view of the judges, etc. *Aprāptakāle grahaṇam* is equivalent to *asaṅgati*, because here a *nigrahasthāna* is urged before or after its proper occasion, when there is no expectancy for it. (21) *Apasiddhānta* = *Svavacana-virodha*. (22) The different *hetvābhāsas* also can be included in one of these six.[56] For example, *kālātyayāpadiṣṭa* can be subsumed under *virodha* (*prabala-pramāṇa-virodha*, contradiction by a more powerful source of knowledge). Mostly *hetvābhāsas* come under *virodha* whether it be of *hetu* or *dṛṣṭānta* or the like.[57]

Jayatīrtha's is only an attempt of a later day to arrive at a more compact classification.

Śrīharṣa has refuted the definitions of a few of the *nigrahasthānas* like *pratijñā-hāni*, *pratijñāntara*, *prātijñā-virodha*, *apasiddhānta* in the second *Pariccheda* of his *Khaṇḍana-khaṇḍa-khādya*. But this adds hardly anything to our understanding of the *nigrahasthānas*, so it not necessary to give an exposition of this here.

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NOTES

1 Akhaṇḍitāhaṁkāriṇaḥ parāhaṁkāraśātanam iha parājayaḥ, sa eva nigrahaḥ sa eteṣu pratijñāhānyādiṣu vasatīti nigrahasya parājayasya sthānam unnāyakam iti yāvat.—VV., p. 30, see also TR., p. 319.

2 Nigrahasthānaprāptau katham apratipattiḥ vipratipattiḥ—yadāyaṁ sādhayitā samarthena sādhanenopāttena pareṇa jātyādibhir ākulīkṛtaḥ uttaraṁ na pratipadyate tadā katham apratipattiḥ kathaṁ vā vipratipattir iti? tadā'pi sādhanasyaiva sāmarthyāparijñānād asamartham etat sādhanam ity apratipattir vipratipattir iti.—NV., 1.2.19.

3 Aindriyakatvād anityaḥ śabdo ghaṭavad iti kṛte'para āha, iṣṭam aindriyakatvaṁ sāmānye nitye, kasmān na tathā śabda iti pratyavasthite idam āha yady aindriyakaṁ sāmānyaṁ nityaṁ kāmaṁ ghaṭo nityo'stv iti. sa khalv ayaṁ sādhakasya dṛṣṭāntasya nityatvaṁ prasañjayan nigamanāntam eva pakṣaṁ jahāti pakṣaṁ jahat pratijñāṁ jahātīty ucyate pratijñāśrayatvāt pakṣasyeti.—NB., 5.2.2.

4 Dṛṣṭaś cāsāv ante vyavasthita iti dṛṣṭāntaḥ, svaś cāsau dṛṣṭāntaś ceti svadṛṣṭānta-śabdena pakṣa evābhidhīyate, pratidṛṣṭānta-śabdena ca pratipakṣaḥ—pratipakṣaś cāsau dṛṣṭāntaś ceti. parapakṣasya yo dharmas taṁ svapakṣa evānujānātīti yathā' nityaḥ śabda aindriyakatvād iti dvitīya-pakṣavādini sāmānyena pratyavasthita idam āha—yadi sāmānyam aindriyakaṁ nityaṁ dṛṣṭam iti śabdo'py evam bhavatv ity eṣā pratijñāhāniḥ, prāg anena pratijñātam anityaḥ śabda iti sāmānyena anaikāntikatvena pratyavasthita idam āha nitya iti. prāk pramāṇāvadhāritārthaparityāgād vipratipattito nigrahasthānam iti. prasaṅga-vidhānād iti cet atha manyase nāsau paścād api śabdasya nityatāṁ pratipadyate kiṁ tu prasaṅgaṁ karoti yadi sāmānyam aindriyakaṁ nityaṁ dṛṣṭaṁ śabdo'py evaṁ bhavatv iti prasaṅgaṁ vidhatte. tac ca nāta eva tatprāpteḥ. yata evāsau hetudoṣoddhāre kartavye prasañjayaty ata eva nigṛhyata iti.—NV., p. 552.

5 See BS., pp. 81–82.

6 Tatra sādhyadharmahānir Vārttike. sādhanadharma-hānis tu anityaḥ śabdaḥ prameyatvād ity ukte anaikāntikena ca dūṣite astu tarhi kṛtakatvād iti yathā. pakṣahānis tu, anitye vāṅmanase kāryatvād ity ukte bhāgāsiddhyā ca prayukte astu tarhi vāg eva tasmād anityeti yathā. etās tisro viśeṣaṇadvārā' pi draṣṭavyāḥ. tad yathā kunaiyāyikena vivādādhyāsitaṁ buddhimat-kartṛpūrvakam iti pakṣite buddhimad iti viśeṣaṇāsāmarthye ca varṇite tarhi kartṛpūrvakam ity evāstv iti sādhyaviśeṣaṇahāniḥ. vivādādhyāsitaṁ kṣityādi kartṛpūrvakam iti pratijñāte Śaṅkarācāryadiśā ca dūṣite vivādādhyāsitam ity evāstv iti

pakṣa-viśesaṇahānir iti. dṛṣṭāntahānis tu, anityaḥ śabdaḥ pratyakṣa-guṇatvād dvyaṇukavad ity ukte sādhanavikalatayā pratyukte mā bhūd dvyaṇukam udāharaṇam ghaṭarūpam bhaviṣyati, na codāharaṇam ādaraṇīyam iti nyāyād iti yathā, yathā vā bauddhasya vyatirekodāharaṇabalena kṣaṇabhaṅga-sādhane pravṛtte aprāmāṇikatvena ca dūṣite astu tārhi ghaṭa evānvayeneti. dṛṣṭāntagatatvena sādhyadharmahānis tu Bhāṣye. sādhanadharmahānis tu pūrvavad dvyaṇuka udāhṛte tathaiva sādhana-vikalatayā ca dūṣite astu tarhi kāryatva-hetvādhāratayā idam evodāharaṇam iti yathā. atrāpi viśeṣaṇahānir ūhanīyā. tad yathā yat kṛtakaṁ tad anityaṁ dṛṣṭaṁ yathā ghaṭadravyam ity ukte dravyapadānarthakye codāhṛte astu tarhi ghaṭa ity eveti dṛṣṭāntaviśeṣaṇahāniḥ. evam antyā kāraṇasāmagrīty atrāpy antyapadānarthakye yat kāryaṁ tad buddhimatkartṛpūrvakaṁ yathā ghaṭa ity udāhṛte pūrvavac ca dūṣite tarhi kartṛpūrvakam ity evāstv iti sādhyaviśesaṇahāniḥ. evaṁ pūrvavat sādhana-viśesaṇahānir dṛṣṭānte. dūṣaṇahānis tu niranuyojyānuyogodbhāvanā'nantaraṁ dūṣaṇāntaraparigraheṇa draṣṭavyā. tad yathā yadi nāyam asiddhaḥ astu tarhi bādhita ity ādi.—BS., pp. 82-83. See also VV., p. 30, NP., pp. 176-177, TR., pp. 319ff.

7 Yady api asya manasi viparivartate asarvagatatvaṁ sādhayitvā mayā asarvagatatve satīti aindriyakatvaṁ hetur viśeṣaṇīya iti tathāpy etad anena na kṛtaṁ kiṁ tu asarvagataḥ śabdo ghaṭavad ity uktvaiva virataḥ parārthānumāne ca vacanagatā guṇa-doṣāh vicāryante na tu vacanānapekṣaṁ vastu.—NVTT, pp. 701-702.

8 Kathaṁ nityā varṇāḥ śrāvaṇatvāt śabdatvavad ity ukte dhvanibhir anekānta iti ca pratyukte sadhvanaya eva varṇā nityā iti pakṣaviśeṣaṇavidhāv anaikānta-parihārāt. śabdo nityaḥ kāryatvād ity ukte bhāge siddhasādhanam iti ca pratyukte varṇātmakaḥ śabdo nitya iti pakṣaviśeṣaṇādhikoktau siddhasādhanatā-parihārāt. agnimad idaṁ surabhi-malinadhūmavattvād ity ukte asamarthaviśeṣaṇatayā ca pratyuke sāgnikṛṣṇāgurumad iti sādhyāntarādhikoktau viśeṣaṇāsāmārthyaparihārāt. vivādādhyāsitaṁ buddhimatpūrvakam ity ukte siddhasādhyatayā ca pratyuktābhāse upādānādyabhijñāpūrvakam iti sādhyaviśeṣaṇādhikoktau siddhasādhanatāparihārāt. tad etat pakṣa-tadviśeṣaṇa-sādhya-tadviśeṣaṇaprakṣepeṇa caturvidhaṁ dūṣaṇāntara-parihārārtham api pravartate avāntarabhedāc cānantyam.—BS., pp. 85-86. See also V.V., pp. 30-31; NP., pp. 178-179.

9 Atra pratijñā-hetvor iti vākyagata-pratiyogidvayopalakṣaṇa-paraṁ virodhasyobhayaniṣṭhatvāt lakṣyagatapratijñāpadam apy uktamātraparam. ekapadotkīrtanaṁ ca tadaṁśa-virodha-sūcanenā'vayavāntoropalakṣaṇabhramaṁ vārayati. tenaikasmin vākye tadaṁśayor avāntaravākyayoḥ padayor vā mitho vyāghāta uktaḥ virodha iti sūtrārthaḥ—BS., pp. 88-89.

10 Sa ca bahuprakāraḥ—pratijñāpadayoḥ pratijñā-hetvoḥ pratijñodāharaṇayoḥ pratijñopanayayor mandaḥ, hetuvirodhāvirodhābhyām anavakāśāt pratijñā-nigamanayor hetusvapadayor hetu-dṛṣṭāntayor hetūpanayayor dṛṣṭānta-svapadayoḥ pratijñā-tarkayoḥ, evaṁ dūṣaṇavākye'pi sa eva prapañcaḥ. sādhyadharminiṣedhād vā, yathā nāsty ātmeti. dharmaniṣedhād vā, yatheśvaro na karteti. dharmividher vā, yathā atītam astīti. dharmavidher vā, yathā paramāṇavaḥ sāvayavā iti. svarūpato vā, yathā hetuvyāpārāt prāg api sat kāryaṁ kāryatvād iti. viśeṣaṇadvārā vā, yathā madhye'py asat kāryam ādyantayor asattvād iti.—BS., p. 90. See also VV., p. 31.–ekatra vākye tadaṁśayor avāntaravākyayoḥ padayor va mithovyāghātaḥ pratijñā-virodhaḥ.....Also TR., p. 329.

11 See NP., pp. 184–185.

12 See NP., pp. 181–182.

13 See NVTT., pp. 706-707.

14 Ekaprakṛtidaṁ vyaktam iti pratijñā, kasmāddhetoḥ ? eka-prakṛtīnāṁ vikārāṇāṁ pariṇāmāt, mṛt-pūrvakānāṁ śarāvādīnāṁ dṛṣṭaṁ parimāṇaṁ yāvān prakṛter vyūho bhavati tāvān vikāra iti, dṛṣṭaṁ ca prativikāraṁ parimāṇam. asti cedaṁ parimāṇaṁ prativyaktaṁ tad eka-prakṛtīnāṁ vikārāṇām parimāṇāt paśyāmo vyaktam idam ekaprakṛtīti. asya vyabhicāreṇa pratyavasthānaṁ, nānāprakṛtīnām ekaprakṛtīnāṁ ca vikārāṇāṁ dṛṣṭaṁ parimāṇam iti. evaṁ pratyavasthite āha ekaprakṛtisamanvaye sati śarāvādi-vikārāṇāṁ parimāṇadarśanāt. sukhaduḥkhamoha-samanvitaṁ hidaṁ vyaktaṁ parimitaṁ gṛhyate, tatra prakṛtyantararūpa-samanvayābhāve saty ekaprakṛtitvam iti. tad idam aviśeṣokte hetau pratiṣiddhe viśeṣaṁ bruvato hetvantaraṁ bhavati.—NB., 5.2 6.

15 Tac ca svamata-paramatobhayānubhayamatabhedena caturvidham. tad yathā anityaḥ śabdaḥ aindriyakatvāt kāryatvād vā, guṇaś ca sa ākāśasya, tad eva copādhivaśāc chrotraṁ tena cāyaṁ gṛhyate samavāyād ityādi. tathaivopakramya paramate ca dravyaṁ śabdaḥ, saṁyogagrāhyo'bhivyaktidharmā cāyam ityādi. tathaivopakramyā' numānagamyam asyā'nityatvam, anumānaṁ ca pramāṇam, tac caturvidhaṁ ṣaḍvidhaṁ vā, kiñcit sattāmātreṇa gamayati, kiñcit jñātaṁ sad ityādi. tathaivopakramya hetur ayaṁ hetuś ca hinoter ityādi.—BS., pp. 94–95.

16 Atra yadā Drāviḍaḥ svabhāṣayā tad-bhāṣānabhijñam āryaṁ prati śabdānityatvaṁ pratipādayati tadā tan nirarthakaṁ nigrahasthānam; sa khalu āryabhāṣāṁ jānann asāmarthya-pracchādanāya tadbhāṣānabhijñatayā vā svabhāṣayā sādhanaṁ prayuktavān so'yaṁ pūrvasmin kalpe vipratipattyā nigṛhyate uttarasmiṁstu apratipattyā. vastutaḥ sādhanasāmarthye'pi mūkavad āryapratipādaka-śabdāpratītes tatpratipādanārambhavaiyarthyāt.—NVTT., p. 710.

17 Tenā'vācakaprayogo nirarthakam ity arthaḥ. tasya caturdhā prayoga-sambhavaḥ. pramādāt, yathā liṅga-vacana-vibhakti-viparyāsaḥ. vācakābhimānāt, yathā kṛt-taddhitā'khyāta-viparyāsaḥ. abhyāsāt, yathā saṁskṛtam upakramyā'pabhraṁśa-vacanam. vikalpita-śeṣokter vā, yathārthaparaśabde paratāprakāravyudasanena svarūpa-paratāyāṁ vāṅmātraṁ caitad iti vat—BS., p. 96.

18 Vaktavyatayā'bhyupagata-bhāṣāmūlavyākaraṇa-siddham eva niyamakathāyāṁ bhāṣitavyam iti. uktaṁ ca Prajñā-paritrāṇe.

> Sādhugirvāṇa-vāṇyaiva prayoga-niyame kṛte,
> apabhraṁśānyabhāṣābhir bhāṣaṇam cā'pi dūṣaṇam.
> akṛte niyame sarvabhāṣābhir api bhāṣaṇaṁ,
> skhalane ca punaḥ sādhuśabdagrahaṇam iṣyate. iti—NP., p. 192.

19 Tac ca trividham. svīya-svīya-tantramātrarūḍham. gamitayogam anapekṣita-rūḍhikam ..padavivekopāyasamāsaprakaraṇādyapāyāpādita-sandehaṁ yathā śveto dhāvatīti.--BS., p. 98.

20 sabhāprasiddhair vivakṣitāsādhāraṇair aṅgamitayogair nirastagrastādidoṣaiḥ padair vyavahared iti sāraḥ. prativādyabhyupagame tu prahelikāprāyā api vyavahārāḥ pravartante. ata eva hi dṛptair mahāvidyādirītīnāṁ prayogo'bhyupagamyata eva.—NP., pp. 198-199.

21 Tac ca trividham. mukhyaṁ yathā Bhāṣyodāhṛtaṁ. vyavadhānānvayaṁ, yathā gaccati payasā'śvena bhuktvā nagaraṁ Caitra iti. vikalpaśeṣānanvayam padārthābhupagame'pi sambhāvita-samastānvaya-prakāra-khaṇḍanāt-tad-anabhyupagamena draṣṭavyam. vikalpāntaḥpātiprakārābhyupagame tu yathoktakhaṇḍanam eva nigrahaḥ. asamarthaviśeṣaṇānanvayaṁ caturtham apārthakam astīti kecit. tad aśiṣyam asāmpradāyikatvād atiprasaṅgāc ca. hetvābhāsāntarbhūtaṁ hi tad iti Vārttikam. na ca tato'nvayapratipattir eva na syāt. bhūtā tv asāmarthyena bādhyate. tathā'pi cā'pārthakatve virodha-hetvābhāsādīnām apy atraivāntarbhāvaḥ syāt. tasmād yatraiva anvayānavagatis tad evā'pārthakaṁ na tu yatrā'sau bādhyetāpīti.—BS., pp. 99-100.

22 Eke tu bruvate-naitan nigrahasthānam evam api siddher iti. samayānabhyupagamāc ca na ca vayaṁ pratīcchāma iti. prayogāc ca—prayuktaś cāvayavavyatyayaḥ sarva-śāstreṣv iti kasyā'yaṁ samaya iti. yat tāvad evam api siddher iti, prayogāpeta-śabdavad etat syāt—yathā gaur ity asya padasyārthe gāvīti prayujyamānaṁ padaṁ kakudādimantam artham pratipādayatīti. na ca śabdānvākhyānaṁ vyartham. anena śabdena go-śabdam evā'sau pratipadyate go-śabdāt kakudādimantam artham. tathā pratijñādy-avayava-viparyāsenā''nupūrvīṁ

pratipadyate ānupūrvyā cārtham iti. etat katham? pūrvaṁ tāvat karmopādīyate tataḥ karaṇam mṛtpiṇḍādyudāharaṇam anekadhā loka iti. yat punar etat samayānabhyupagamāt iti, nāyaṁ samayo'pi tv arthasyānupūrvī, so'yam arthasyānupūrvīm anvācakṣāṇo nābhyākhyeya iti. yat punar etat prayogād iti, na, nigrahasthāna-viṣayāparijñānāt—śāstre vākyāny arthasaṅgrahārtham upādīyante saṁgṛhītaṁ tv arthaṁ vākyena pratipādayitā prayoga-kāle pratijñādikayā''nupūrvyā pratipādayatīti.—NV., pp. 555–556

Na hi śāstre kṛtsnāsad ivā''darabhūtad ivety arthasaṅgraho yathā kathaṁcit kriyate iti vāde pi tathā kriyatām iti yuktaṁ vādādiṣu pakṣa-pratipakṣavad vaktror api parīkṣyamāṇatvāt parīkṣitasya ca śāstritatvāt.—NVTT., p. 715.

23 Avayava-śabdas tv atra samastakathābhāga-saṅgrahārthaḥ tena caturvidham etat pāda-pādāṁśā' vayava-tadaṁśa-viparyāsabhedāt.—BS., p. 101.

24 Eke tu pratijñā-nyūnaṁ nastīty ācakṣate. etat tu na yuktam. pratijñāmātreṇa prayogo vikalpataḥ paryanuyojyaḥ, yaḥ pratijñānyūnaṁ vākyam brūte kim ayam nigṛhyate'tha neti? yadi nigṛhyate katamat nigrahasthānam iti? na hi hetvābhāsādayo'tra santīti. na ca hetvādidoṣāḥ santīti nigrahaṁ cābhyupaiti, tasmāt pratijñā-nyūnam eveti. atha na nigrahaḥ? nyūnaṁ vākyaṁ arthaṁ sādhayatīti sādhanābhāve siddhir abhyupagatā bhavati. yat tu bravīṣi siddhānta-parigraha eva pratijñā etad api na buddhyāmahe karmaṇaḥ upādānam pratijñā. sāmānya-viśeṣavato'vadhāritasya vastunaḥ parigrahaḥ siddhānta iti.—NV., pp. 556-557.

25 Eke tu bruvate nedaṁ nigrahasthānaṁ dārḍhyād, dārḍhyaṁ hi jñāpyasya bhūyobhir jñāpakair dṛṣṭaṁ yathā dhūmālokābhyām agner iti. na, dārḍhyārthānabhidhānāt bhūyobhir jñāpakair dārḍhyaṁ bhavati iti na dārḍhyārtho' bhidhīyate. kiṁ bravīṣi dārḍhyād iti. sutarāṁ pratipattir dārḍhyam iti. tad api tādṛg eva, kim uktaṁ bhavati sutarām iti. atha bravīṣi dve api jñāpake? satyaṁ dve api jñāpake. ekenaivābhidhānād vyartham abhidhānaṁ dvitīyasya prakāśite dīpāntaropādānavad iti anavasthā ca prakāśite'pi sādhanāntaropādānād iti.—NV., p. 557.

26 Eke tu bruvate nedaṁ nigrahasthānam abādhanāt na hi parīkṣāvidheḥ punar bruvatā kiñcid bādhyate; para-pratipādanārthaṁ ca vākya-prayogaḥ, punar abhidhānena sutarām arthaḥ pratipadyate iti na nigrahasthānaṁ pratipādakatvāt. satyaṁ pratipādayati; pratipāditārtha-pratipādakatvād vaiyarthyaṁ syād vaiyarthyān nigrahasthānaṁ sādhana-viṣayāparijñānāt. na cā' yaṁ śiṣyo na gurus tasmān nāyaṁ punaḥ pratipādyata iti.—NV., pp. 557-558.

27 Dūṣyamātram evānubhāṣaṇīyaṁ na tu sarvaṁ vādi-vākyam. anupayuktābhidhānenā'rthāntaratva-prasaṅgāt. prauḍhi-prakaṭanāya sarvānubhāṣana-niyame tad-akaraṇam eva nigrahahetur bhavati. na ca tenaiva vādi-vakyenā'nubhāṣaṇīyam iti niyamaḥ. vākyāntareṇā'nubhāṣaṇe'pi tatprayojana-siddheḥ.—TR., p. 349.

28 Uttareṇā'vasthānāt nedaṁ nigrahasthānam iti kecit—uttareṇā'vasthānāt uttareṇa guṇadoṣavatā mūḍhatvāmūḍhatvaṁ gamyata iti kim punar uccaritenāsti. asti hi uttare kaścit samartho dṛśyate na pratyuccāraṇe, nā' sau tāvatā nigrahasthānam arhati. yaś cā''rabhya svapakṣaṁ na nirvāhayet tasya syāt khalīkāramātram iti.—NV, p. 558.

29 See NVTT., p. 719.

30 Na, uttara viṣayā' parijñānāt—yady ayaṁ na pratyuccārayati, nirviṣayam uttaraṁ prasajyate. athottaram bravīti, kathaṁ noccārayati tad idaṁ vyāhatam ucyate noccārayaty uttaraṁ ca bravītīti. apratijñānāc ca nedaṁ pratijñāyate pūrvam uccārayitavyaṁ paścād uttaram abhidheyam api tu yathākathaṁcid uttaraṁ vaktavyam uttaraṁ cā''śrayābhāve na yuktam iti yuktam apratyuccāraṇaṁ nigrahasthānaṁ iti.—NV., p. 558.

31 Tathā ca tadityādisarvanāmnā'nuvādena vā ekadeśānuvādena vā viparītānuvādena vā kevaladūṣaṇoktyā vā stambhena veti pañcadhā vibhāvyate.—BS., pp. 110-111.

32 Etac ca kasya parājaya ity anuyuktayā pariṣadā vacanīyaṁ. na khalu nigrahaṁ prāptaḥ svakaupīnaṁ vivṛṇuyād iti.—NB, 5.2.22.

33 Na cāyam apratibhāto na bhidyate. sa hy uttarā'pratipattir iyaṁ tu anuttarasyaivottaratvena vipratipattir iti mahān viśeṣaḥ. anenaiva sarvā jātayo nigrahasthānatvena saṅgṛhītā bhavanti. na ca hetvābhāsānām ito na bhedaḥ; te hi vādino nigrahasthānam ayaṁ tu prativādina iti mahān viśeṣaḥ —NVTT., p. 723.

34 Sa caturvidhaḥ, chalaṁ jātir ābhāso' navasaragrahaṇaṁ ceti...ābhāso yathā, anekakalpasphuraṇe vikalpato'niṣṭakalpatyāgena pratijñāhāniḥ. prakaraṇādyāpannaviśeṣāviṣkaraṇena pratijñāntaram. anavasara-grahaṇaṁ tu yathoktāvasaram aprāpyā'tikramya vā grahaṇam. yathā tyakṣyasi cet pratijñā-hāniḥ...—BS., pp. 120-121. See also PP. p. 59—"Niranuyojyānuyogaḥ sa ca caturvidhaḥ chalaṁ jātiḥ hānyādyābhāsaḥ aprāptakale grahaṇaṁ ceti"—Udbhāvana-kālam aprāpyā' tikramya vā nigrahasthānodbhāvanam aprāpta-kāle grahaṇam.—PP. pp. 73.

35 Nigrahasthānābhāsavacanam api bahuvidhaṁ. tan nigrahasthānābhave tadāropaṇaṁ, nigrahasthānāntare tadanyanigrahasthānavacanaṁ, svasamaye

nigrahasthāratvenā'parisaṅkhyātasya nigrahasthānatayā prasañjanam, kṣantavyatayā' bhyupagatasyodbhāvanam ity ādi.—NP, p. 214.

For *Niranuyojyānuyoga*, see pp 211-215

See also Vardhamāna's *Prakāśa* on BS.. p. 121.

36 See *Nyāya-sūtra-vṛtti*, p. 69 (Ānandāśrama series).

37 Kiṁ punar vākya-praśaṁsā-lakṣaṇam. atrocyate. yuktyaviruddham anadhikam anyūnam adhigata-padārthaṁ, vacanadharmanibaddhaṁ prasiddha-dṛṣṭāntā'viruddham ananuyojyaṁ ca. ebhir hetubhir vākya-praśaṁsety ucyate.—UH., p. 10.

Atha ke vākyadoṣāḥ. atrocyate. pūrvokta-viparīta-vakya- doṣāḥ. vākya-doṣāḥ punar dvividhāḥ. kiṁ ca tad dvaividhyam. arthasyābhede punaruktiḥ. vākyasya cābhede punaruktiḥ. . . yad alaṁkṛtam asaṅgataṁ voktaṁ sa sarvo vākyadoṣa ity ucyate. aparaṁ ca yad ukti-samupetam apy akramam eṣo'pi vākyadoṣa iti.—UH., p. 12.

38 Hetvābhāsānāṁ lakṣaṇāny aparimitāni saṁkṣepatas tv aṣṭāv eva. vāk-chalaṁ, sāmānya-chalaṁ, saṁśaya-samaḥ, kālātītaḥ, prakaraṇa-samaḥ varṇya samaḥ, savyabhicāraḥ, viruddhaḥ.—UH. p. 14.

39 See UH., p. 15.

40 Based on *Buddhist Logic Before Diṅnāga*, pp. 459-460—Tucci (JRAS, July, 1929).

41 *Nyāyamukha*, Translation, p. 71.—Tucci (Heidelberg, 1930).

42 Iṣṭasyārthasya siddhiḥ sādhanam, tasya nirvartakam aṅgaṁ,tasyāvacanaṁ tasyāṅgasyānuccāraṇaṁ vādino nigrahādhikaraṇaṁ. tadabhyupagamyā-pratibhayā tūṣṇīṁbhāvāt. sādhanāṅgasyāsamarthanād vā. trividham eva hi liṅgam apratyakṣasya siddher aṅgaṁ svabhāvaḥ kāryam anupa-lambhaś ca. tasya samarthanaṁ sādhyena vyāptim prasādhya dharmiṇi bhāvasādhanam.—VN., pp. 5-6.

See also Śāntarakṣita's commentary *Vipañcitārthā*.

43 Atha vā sādhyate tena pareṣām apratīto'rtha iti sādhanaṁ trirūpa-hetuvacana-samudāyaḥ. tasyā'ṅgaṁ pakṣadharmādivacanaṁ tasyai-kasyā'py avacanam asādhanāṅga-vacanaṁ, tad api vādino nigraha-sthānaṁ, tad-avacane heturūpasya'vā'vacanam avacane ca siddher abhāvāt.—VN., pp. 60-61.

44 Atha vā tasyaiva sādhanasya yan nāṅgam pratijñopanaya-nigamanādi tasyā'sādhanāṅgasya sādhana-vākye upādānaṁ vādino nigrahasthānaṁ vyarthābhidhānāt.—VN., p. 61.

45 Anvaya-vyatireka-vacanayor vā sādharmyavati vaidharmyavati ca sādhana-prayoga ekasyaivā'bhidhānena siddher bhāvād dvitīyasyā'sāmarthyam iti tasyā'py asādhanāṅgasyābhidhānaṁ nigrahasthānaṁ vyarthābhidhānād eva.—VN., p. 65.

46 VN., p. 66.

47 VN., pp. 66-69.

48 VN., pp. 69-71.

49 VN., pp. 72-73.

50 Idaṁ punar asambaddham eva sāmānyaṁ nityam aindriyakam ity uktaḥ śabdo'py evaṁ astu iti kaḥ svasthātmā svayam aindriyakatvād anityaḥ śabdo ghaṭavad iti bruvan sāmānyenopadarśanamātreṇa nityaṁ śabdaṁ pratipadyate...tasmād aindriyakatvasya nityānityapakṣavṛtter vyabhicārād asādhanāṅgasyopādānān nigrahārho, na pratipakṣa—dharmānujñayā'nena prakāreṇa pratijñāhāneḥ.—VN., p. 77.
For refutation of other *nigrahasthānas*, see VN., pp. 78-142.

51 Prakṛtā'śeṣatattvārtha-prakāśa-paṭuvādinaḥ,
vibruvāṇo'bruvāṇo vā viparīto nigṛhyate.
asādhanāṅga-vacanam adoṣodbhāvanaṁ dvayoḥ,
na yuktaṁ nigrahasthānam arthāparisamāptitaḥ.
vādī parājito'yukto vastutattve vyavasthitaḥ,
tatra doṣaṁ bruvāṇo vā viparyastaḥ kathaṁ jayet.
—NyV. II, 377-379.
āstāṁ tāvad alābhādir ayam eva hi nigrahaḥ.
nyāyena vijigīṣūṇāṁ svābhiprāya-nivartanam.—*Ibid*, 383.
Tathā ca saṁkṣepataḥ 'svapakṣasiddhir ekasya nigraho'nyasya vādinaḥ' iti vyavatiṣṭhate. na punar vipratipattyapratipatti tadbhāve'pi kasyacit svapakṣa-siddhyabhāve parasya parājayānupapatter asādhanāṅgavacanā'-doṣodbhāvanamātravat, chalavād vā—TŚlv., p. 294.
See TŚlv., pp. 283-294; also PKM., p. 663-671; PM. II, 1.34-*Vṛtti*.

52 See PM. II, 1.35 and its *Vṛtti*; also *A Critique of Organ of Knowledge* (*Pramāṇa Mīmāṁsā*)—Translation by Mookerjee and Tatia (Bahadur Singh Singhi Series No. 1). (I have used this translation and have mostly adopted its terminology.) Also,
sādharmya-vaidharmyayor anyatareṇārthāv ubhaya-pratipādanaṁ pakṣādivacanaṁ vā nigrahasthānaṁ iti na tad yuktam. sādhana-sāmarthyena vipakṣa-vyāvṛtti-lakṣaṇena pakṣaṁ prasādhayataḥ kevalaṁ vacanādhikyopālambhacchalena parājayādhikaraṇaprāptiḥ svayaṁ nirākṛtapakṣeṇa pratipakṣiṇā lakṣaṇīyā?—*Aṣṭaśati*, p. 81; nirākṛtāvasthāpitavipakṣa-svapakṣayor eva jayetaravyavasthā nā'nyathā.—*Ibid*, p. 87;

yathoktena hi sādhana-sāmarthyena svapakṣaṁ sādhayataḥ sadvādinaḥ sabhya-samakṣaṁ jaya eveti yuktaṁ, na kevalaṁ vacanādhikyopālambha-vyājena parājayādhikaraṇa-prāptiḥ sādhīyasī, svasādhyaṁ prasādhya nṛtyato'pi doṣābhāvāl lokavat. sā ca svayaṁ nirākṛtapakṣeṇa prativādinā lākṣaṇīyety api na yuktaṁ, pareṇa nirākṛtapakṣasyaiva parājaya-prāptiyogyatvaniścayāl lokavad eva.—*Aṣṭasahasrī*, p. 81.

tad uktam—'svapakṣa-siddher ekasya nigraho'nyasya vādinaḥ,
na sādhanāṅga-vacanaṁ na doṣodbhāvanaṁ dvayoḥ.'

tathā Tattvārthaślokavārttike'py uktaṁ—
"svapakṣa-siddhiparyantā śāstrīyārthavicāraṇā,
vastvāśrayatvato yadval laukikārthavicāraṇā." iti.—Ibid, p. 88.

Also TŚlv., pp. 281-283; NyV. II, 378, 383; PKM., pp. 671-674. For *chala* etc. see *Nyāyakumudacandra*, pp. 316-340, edited by Pt. Mahendra Kumāra.

53 Tad uktam—
"viruddhaṁ hetum udbhāvya vādinaṁ jayatītaraḥ,
ābhāsāntaram udbhāvya pakṣa-siddhim apekṣate." iti—TŚlv, p. 280; asiddhādayo'pi hetavo yadi sādhyāvinābhāvaniyamalakṣaṇayuktās tadā na hetvābhāsā bhavitum arhanti. na caivaṁ, teṣāṁ tadayogāt. na hy asiddhaḥ sādhyāvinābhāvaniyatas tasya svayam asattvāt. nā'py anaikāntiko vipakṣe'pi bhāvāt. na ca viruddho vipakṣa eva bhāvād ity asiddhādi-prakāreṇā'py anyathānupapannatva-vaikalyam eva hetoḥ samarthyate. tatas tasya hetvābhāsatvam iti saṁkṣepād eka eva hetvābhāsaḥ pratīyate, anyathānupapannatva-niyama-lakṣaṇaika-hetuvat atas tadvacanaṁ vādino nigrahasthānaṁ parasya pakṣasiddhāv iti pratipattavyam.—TŚlv., pp. 293-294; also PKM, p. 671.

54 See SV, *Jalpasiddhi*; TŚlv., pp. 281–283.

55 Atha nirdoṣopapattir anumānam ity uktam. ke tatra upapattidoṣāḥ? yat-sadbhāve liṅgābhimataṁ jñānam eva na janayati saṁśaya-viparyayau vā karoti te doṣāḥ. te dvividhāḥ. artha-vacanadoṣabhedāt. tatra sākṣād upapatter eva doṣau virodhāsaṅgatī taddvarā vacanasyā'pi. vacanadoṣau nyūnādhikye. vacanadvāreṇārthasyā'pi. tatra yogyatā'-bhāvo virodhaḥ. ākāṅkṣāviraho saṅgatiḥ. avaśyavaktavyasyaikadeśa-mātravacanaṁ nyūnam. ākāṅkṣitasyaivā'nyena kṛtakāryasya vacanam ādhikyam. ete ca virodhādayo dvividhāḥ. samayabandha-praśna-svapakṣasādhana-parapakṣa-nirākaraṇātmaka-kathārūpa-sādhāraṇāḥ, anumānaniṣṭhāś ca..na kevalam upapattidoṣāṇāṁ virodhādibhiḥ saṅ-grahaḥ. kiṁ nāma. naiyāyika-nirūpitāśeṣa-nigrahasthānānāṁ vaktṛdoṣā-bhyāṁ saṁvāda'nuktibhyāṁ yukteṣv evāntarbhāvaḥ. tataś ca virodhā'-saṅgatī nyūnādhike saṁvādānuktī iti ṣaḍ eva nigrahasthānāni.—PP.; pp. 48-51; see also *Ibid*, pp. 48-79.

56 For *hetvābhāsas* see PP., pp. 73–79.

57 See PP., pp. 49–50.

CHAPTER 7

FALLACIES OF REASONING

The modes of argument involving *chala, jāti*, and *nigrahasthāna* are directly connected with actual discussions in a debate. These no doubt involve faults in argument, and *hetvābhāsa* (fallacy of probans) also when detected in an argument is one of the *nigrahasthānas* and is actually mentioned as one. However, the *Nyāya-sūtra* mentions *hetvābhāsa* as a separate *padārtha* or topic of the *śāstra*. This indicates that *hetvābhāsa*, whether in actual debate or in written discussion or in any other form of abstract reasoning was something which touched the very essence of ratiocination, and therefore was something more than just a device in debate to trap the opponent. In fact, it is a fallacy in the reasoning process itself.

The canon of the rules of syllogism, it may be noted, is at the same time a canon of logical fallacies, for a fallacy is nothing else but the infringement of a rule. Every syllogistic rule condemns a corresponding fallacy. It appears that these rules were gradually formulated to avert the contingency of fallacies which were generally detected in arguments in debates and discussions, and closely analysed to find out where the fault lay.

We find the *Nyāya-sūtra* recognising principally five kinds of fallacies of reason (*hetvābhāsa*)—*savyabhicāra* or *anaikāntika* (inconclusive), *viruddha* (contrary), *prakaraṇa-sama* (counter-balanced or neutralised), *sādhyasama* (=*asiddha*, unestablished or unreal) and *kālātīta* (mistimed—later on *bādhita* or contradicted); and the Buddhists and the Jainas generally recognising three *hetvābhāsas*—*anaikāntika, viruddha*, and *asiddha*.[1]

(A) The *Anaikāntika* (inconclusive) reason is that which is indecisive (*savyabhicāro naikāntikaḥ*—NS 1.2.5). '*Anaikāntika*' means that which is not restricted to *ekānta*, or one fixed point, that is to say, which would be present or absent in both cases where the probandum (*sādhya*) is absent or present, or be present in only the particular instance of the existence of the *sādhya*, so that its invariable concomitance cannot be determined, and it cannot lead to a definite conclusion or is indecisive (*savyabhicāra*).

Savyabhicāra can also be taken as the term defined, and *anaikāntika* as its definition. '*Vyabhicāra*' literally means non-concomitance; that is to say, in the present case the probans would either go beyond its proper limit and be present both where the probandum exists and where it does not exist, or be too restricted in scope, that is to say, be existent only in the *pakṣa* (subject or minor term) with the result that no general rule of invariable concomitance can be framed, and so leads to no conclusion or is inconclusive.

For example, '*Nityaḥ śabdo' sparśatvāt, sparśavān kumbho' anityo dṛṣṭo, na ca tathā sparśavān śabdaḥ, tasmād asparśatvān nityaḥ śabdaḥ*' (word is eternal, because it is intangible, unlike the tangible non-eternal pitcher). But whatever is intangible is not eternal, e.g. atoms (which are eternal and tangible); and all non-eternal things are not tangible, e.g. *buddhi* (intellect—which is non-eternal and intangible)

Thus, that probans is *anaikāntika* (inconclusive) which while subsisting in the *pakṣa* (subject) and the *sapakṣa* (similar case or homologue where the probandum also is present), subsists in the *vipakṣa* (dissimilar case or heterologue where the probandum is absent) also, e.g. word is eternal, because it is knowable (—knowable things may be both eternal as well as non-eternal). The 'too-specific probans' (*asādhāraṇa*) also is included in this definition of *anaikāntika* by Uddyotakara, as it also when taken negatively is such as has its negation in, or is absent in, both the *sapakṣa* and the *vipakṣa*, e.g. Earth

is eternal, because it is odorous. Here odorousness is found in earth alone, it does not subsist in any other eternal thing or in any non-eternal thing (See NV., p. 171).

Later logicians recognise a third type of *anaikāntika*, viz. *anupasaṁhārin* (non-exclusive) over and above the *sādhāraṇa* (over-wide) and the *asādhāraṇa* (too-specific) mentioned above; though even Uddyotakara illustrates this when enumerating all likely fallacies in *Nyāya-vārttika*, 1.2.4. An example of *anupasaṁhārin* is—'Everything is eternal because it is cognisable'. The *anupasaṁhārin* or non-exclusive reason is that in whose case there is neither *sapakṣa* (homologue) nor *vipakṣa* (heterologue).

(B) A certain doctrine or view having been accepted, the probans that is contrary to it is called *Viruddha* (contrary) (*siddhāntam abhyupetya tad-virodhī viruddhaḥ.*—NS., 1.2.6). The following two statements in the *Yoga-bhāṣya* III, 13 are an instance in point : "This world, being a modification ceases to be manifest, because its eternality is denied." and "Even when thus ceasing to exist, it continues to exist because its utter destruction is denied." (*so'yaṁ vikāro vyakter apaiti nityatva-pratiṣedhāt. apeto'py asti vināśa-pratiṣedhāt*). Here we find that what the probans in the former reasoning, 'because its eternality is denied' means is that no modification can be eternal, and this is certainly contrary to the doctrine enunciated in the second statement that even when ceasing the modification continues to exist. Thus the probans put forward (viz. denial of eternality) rejects the very doctrine of continuity of existence on the basis of which it is put forward. *

There is a marked difference between Gautama's and Vātsyāyana's account of *viruddha* (contrary) probans as given above and that given by the later Naiyāyikas. According to

* It is interesting to note the difference in the connotations of words viz *vikāra, vināśa*, etc. in the different systems as a result of which what is valid for one system of thought becomes invalid for another.

the former, the probans is contrary to some doctrine that its propounder has already accepted, whereas according to the latter it proves the contrary of the proposition which it is meant to prove, e.g. 'Word is eternal, because it is created.'×

The artificial nature of word is exactly the reason why word should be non-eternal. Thus the contrary reason is that which subsists in heterologues (*vipakṣas*) alone. The earliest mention of this later view is found in Uddyotakara's *Nyāya-vārttika* as an alternative explanation of the definition given in the *Nyāya-sūtra* (*pratijñā-hetvor vā virodhaḥ—yo pratijñā-hetvor virodhaḥ sa viruddho hetvābhāsaḥ*—NV., p. 172).[3]

(C) *Prakaraṇasama* (or the later *Sat pratipakṣa*) (counter-balanced reason) is that which is adduced to establish a definite conclusion, while it is one that only gives rise to suspense or vacillation in regard to the point at issue (*yasmāt prakaraṇacintā sa nirṇayārtham apadiṣṭaḥ prakaraṇasamaḥ.*—NS, 1.2.7). The term '*prakaraṇa*' (point at issue) stands for the two opposite views on a doubtful question which are made the *sādhya* by the two parties, neither of them being definitely ascertained, *Cintā* in regard to such a point at issue consists in the desire to ascertain the truth in the whole process of investigation, which starting with doubt ends in a conclusion. Now that reason which really only gives rise to the said suspense, if put forward as leading to a definite cognition does not differ in point of being doubtful from the *prakaraṇa* or the point at issue, as both sides would be equal, equally doubtful; and thus being similar (*sama*) to the

× Udayana distinguishes the *hetvābhāsā viruddha* from the *nigrahasthāna apasiddhānta* thus: We have *apasiddhānta* when the assertion made goes against what the speaker has declared previously on the basis of a more authoritative *pramāṇa*; while there is *virodha* when the assertion itself contains within itself the elements of contradiction, when one part of it states one thing and another part a contrary thing. Uddyotakara has shown the distinction between the *viruddha* probans and the *nigrahasthāna pratijñā-virodha*. In *pratijñā-virodha*, the contradiction is in the terms of the proposition; whereas in *viruddha-hetvābhāsa*, the contradiction is of the proposition by the probans, or of the probans by the proposition. See NV, p. 173.

point at issue (*prakaraṇa*), it does not lead to any conclusion. For example, " Word is non-eternal, because the properties of an eternal thing are not found in it; and we have found in the case of dish and the like that what is not found to possess the properties of an eternal thing is non-eternal. " This is counter-balanced by " Word is eternal, because the properties of a non-eternal thing are not found in it ......"; and thus no definite conclusion can be arrived at by means of a *prakaraṇasama* probans, as there is nothing to favour either of the opposite views. Vācaspati clarifies the explanation of the '*prakaraṇa-sama*' by saying that the etymological explanation of the term as ' similar to the points at issue' (*prakaraṇābhyāṁ samaḥ*) is not meant to make it an equivalent of *sādhyasama*. In fact what the term conventionally signifies is only being neutralised, that is to say, having an opposing reason equally strong[4] The *prakaraṇa-sama* or *satpratipakṣa* reason, to put it explicitly, is that counter-balancing which there is another reason proving the negation of the thing to be proved (*sādhyābhāva-sādhakaṁ hetvantaraṁ yasya sa satpratipakṣaḥ.—Tarkasaṅgraha*, 55).

(D) *Sādhyasama* (*–Asiddha*, unestablished or unreal) probans is that which being still to be proved is not different from the probandum (*sādhyāviśiṣṭaḥ sādhyatvāt sādhyasamaḥ*— NS., 1.2.8). For example, " Shadow is a substance, because it has motion." (That a shadow has motion is still to be proved, hence the requirement of *pakṣa-sattva*, presence in the subject, is lacking). Here the probans is itself *asiddha* (unestablished). Such a probans is known as *svarūpāsiddha* It may be argued, " Shadow is mobile, because it is found in different places; everything, that is found in a place other than it was before in, is found to be a moving object, as for instance, man; shadow is found in a place different from its former place, therefore, shadow has motion." But this argument is not right as the probans here put forward is one whose substratum or basis is *asiddha* (unestablished), such a probans being known as *āśrayāsiddha*. The substantiality of the

shadow is still *asiddha*. Even admitting that there is perception of the shadow in different places we find that it is still vitiated by the fallacy of *asiddha* inasmuch as this is capable of being otherwise explained (*anyathā-siddha*, otherwise-established), and a probans can prove the probandum only when their relation is a natural one. Thus here we have *asiddha* of the *anyathā-siddha* type. We can explain the shadow in different places thus : As the object obstructing the light moves along, we perceive things (e.g. spots of earth) qualified by the absence of light, and it is to this that we give the name 'shadow'.

Thus the *asiddha* probans is three-fold (*a*) *prajñāpanīya-dharma-samāna,* similar to what is to be proved, later called *svarūpāsiddha*, (*b*) *āśrayāsiddha,* whose subject is *asiddha*, (*c*) *anyathā-siddha*, otherwise established or circumstantial. (See NV., pp. 174–175).

The *Vārttika* has deduced examples of all the three from the single reasoning cited in the *Bhāṣya.* Vācaspati gives three distinct examples—(*a*) *svarūpāsiddha*—Word is eternal, because it is perceived by the eye; (*b*) *āśrayāsiddha* —God is not the creator because he is bodiless (—The existence of God has not been established); (Or 'Sky-lotus is fragrant, because it is a lotus, like a lotus in a lake'—here the subject is non-existent); (*c*) *anyathā-siddha*— 'He is dark because he is Maitra's son, like other sons of Maitra'. Here the relation between 'being Maitra's child' and 'darkness' is purely accidental or otherwise established, the darkness of the other children of Maitra being due to causes other than being Maitra's offspring; it is due to such causes as the eating of a particular kind of food by their mother.[5] Later Naiyāyikas call it *sopādhika*, involving an extra condition or adventitious factor. For instance, 'The mountain is smoky, because it is fiery'; here, presence of moist fuel is the extra condition which being present, the conclusion is alright. It is also called *vyāpyatvāsiddha,* because its concomitance with the probandum is not established as it is purely accidental.

Laugākṣi Bhāskara and Annaṁ Bhaṭṭa treat this as a fallacy; but there is a view which does not accept this as a case of fallacious reason, because if the adventitious condition or *upādhi* is borne in mind, it is possible to reason accurately. We can say correctly, ' The fuel being moist, wherever there is fire, there is smoke.'

Later, a fourth variety also was recognised-*bhāgāsiddha*, (unestablished or unreal in a part i.e. partly unestablished), e.g. Atoms of earth, water, fire, air are eternal, because they are possessed of odour. [Only earth-atoms are possessed of odour, so the probans is *asiddha* in respect of the other part of the subject (*pakṣa*)].

Later Naiyāyikas have recognised a number of *asiddhas*, according as the qualification or the thing qualified or both are insignificant or ineffectual or are both uncertain and insignificant. (*Tatrāsamarthaviśeṣaṇāsamarthaviśeṣyāsamartho-bhayasandigdhāsamarthaviśeṣaṇa-sandigdhāsamarthaviśeṣya-sandigdhāsamarthobhayabhedād anekaprakārikā* —VV., p. 18. See also PP., pp. 74-75). For instance, ' Mountain has fire, because there is golden smoke on it ' (The qualification ' golden ' is ineffectual); ' Word is non-eternal, because being produced it has generality' ('generality' is ineffectual—*asamartha-viśeṣyāsiddha*); and so on. (See also *Ratnākarāvatārikā* on PNTL., pp. 102-103).

(E) When one part or factor of what is adduced as probans is found to be affected by lapse of time, it is said to be *kālātīta* (belated) (*kālātyayāpadiṣṭaḥ kālātītaḥ*—NS., 1.2 9). For example, "Sound is eternal, because it is manifested by conjunction, like colour. The colour that is manifested by the conjunction, of light with the jar is one that was in existence before, and will be in existence after, its manifestation. Similarly, the sound, that is manifested by the conjunction of the drum and the stick, or of wood and axe, is one that is in existence before and after its manifestation, so that being manifested by conjunction, sound must be regarded as eternal." This is not a

valid probans, because when adduced it is behind time. In the case of colour, the time at which the manifesting conjunction occurs does not go beyond, that is to say, does not differ from that at which the manifested colour exists. Colour exists as long as it is manifested. The case of sound however is entirely different; it is only after the conjunction of the drum and the stick has ceased that sound is heard by the man at a distance, so that the manifestation of sound is beyond the time of the conjunction and as such it cannot be caused by that conjunction. Thus it is found that what is adduced as the probans is not a case similar to that of the example and as such it cannot prove the proposition, and is therefore, a fallacious probans.

The later Naiyāyikas recognise a *hetvābhāsa* called *bādhita* (contradicted) in the place of the *kālātīta* of the *Nyāya-sūtra*. A reason is *bādhita* when what it is supposed to prove is contradicted by another more authoritative or reliable source of knowledge. For example, 'Fire is cold, because it is a substance, like water' (—Our touch-perception tells us that fire is hot): Meru is made of stones, because it is a mountain, like the Vindhya (—This conclusion is contradicted by the testimony of the *śāstras*).

It is clear from the explanation of *kālātīta* as given in the *Nyāya-sūtra*, the *Bhāṣya*, and the *Vārttika* that the conception of this fallacy has undergone a complete change at the hands of the later logicians beginning with Vācaspati, who makes a desperate but disappointing attempt to meet this discrepancy. Vācaspati says that the *hetvābhāsa* as here explained would only be a type of the *asiddha*, as a part of the probans, viz. the qualification 'conjunction' in 'because it is manifested by conjunction' is not existent at the time of the manifestation. The *Bhāṣya* has not pointed this out as it is so obvious. And this explanation is given in the *Bhāṣya* as only a *paramata*, 'view of others'.[6] Vācaspati says that the first sentence of the *Bhāṣya*, 1.2.9 states both views—the *svamata* (own view) and the *paramata* (the view of others)—taking care to brand what clearly is the view of the *Bhāṣya* as *paramata* and the later or 'modern'

view as *svamata*. According to Vācaspati, *artha* (thing) in the *Bhāṣya* stands for the subject (*pakṣa*) of the proposition in which the probans should subsist; and the *pakṣa*, like every thing, has two factors, the thing itself and its qualities; and when one of these factors—the quality—is found to be established by a stronger *pramāṇa* and so is no longer doubtful, the probans is said to be *kālātīta*, because its proper time of functioning, viz. when the matter was doubtful, has passed away and stronger proof has already established the contrary of what it intends to prove. For instance, 'Fire is cool, because it is a substance';—touch-perception has already proved beyond doubt that fire is hot, so the probans is *kālātīta*. Finding that the example given in the *Bhāṣya* is not in harmony with his own view, Vācaspati says that the example according to the true view has not been given in the *Bhāṣya*, because several examples of it have already been given; when for instance, it was said that no conclusion can be deduced from what is contrary to well-ascertained facts of perception or to scripture; so the *Bhāṣya* cites an example only according to the *para-mata*. [7]

It can be seen that the author of the *Nyāya-sūtra* has not attempted to formulate explicitly the reasons or the principles underlying the fallacies that he has enumerated. What is simply found necessary is the knowledge of the relation of invariable concomitance and the existence of the probans to lead to the knowledge of the probandum. These when critically examined, and with the development of logical thought led to the rules of '*pakṣe sattvam*' (presence in the subject), etc. The conception of some of those fallacies is also very much different from the later one.

Kaṇāda defines fallacious reason or non-reason (*anapadeśa*, —in his terminology *apadeśa* signifying *hetu* or reason—) as that which is unproven (*aprasiddha*), as that which is not known to be invariably concomitant with what is to be proved He recognises two classes of fallacies of probans—*asat* (corresponding to *asiddha*), and *saṁdigdha* (doubtful, corresponding to

anaikāntika or *savyabhicāra*). The illustration given for *asat* is, 'Since it has horns it is a horse'; for *saṁdigdha*, 'Since it has horns it is an ox'.[8]

Among the Buddhists before Diṅnāga, the author of the *Upāyahṛdaya* says that there can be innumerable *hetvābhāsas*, which he would accomodate under eight classes—*vāk-chala*, *sāmānya-chala*, *saṁśaya-sama*, *kālātīta*, *prakaraṇasama*, *varṇya-sama*, *savyabhicāra* and *viruddha*. We have already discussed *chalas*. *Saṁśaya-sama* somewhat corresponds to *anaikāntika*, as a property which is common to more than one thing cannot be adduced as a sign of one particular thing, though the author of the *Upāyahṛdaya* is not clear when he says that it signifies a doubt or reflection whether a particular thing is a man or a post on seeing it at night, on account of the similarity of post to man. *Kālātīta* of the Buddhists corresponds to the *nigrahasthāna* '*aprāpta-kāla*'. *Prakaraṇa-sama* and *varṇyasama* are *jātis*.

Savyabhicāra is illustrated as follows :—"The five objects of sense are non-eternal, because they are perceived by the sense organs, like the four elements." But perceptibility by the senses is not a sufficient reason for inferring non-eternality. Tortoise's hair, etc. which are non-existent are the objects of mental cognition. Would you, therefore, call them non-eternal ?

Viruddha (contrary) is two-fold—*dṛṣṭāntaviruddha* (contrary to example) and *yukti-viruddha* (contrary to conventional or scriptural order). An illustration of *dṛṣṭānta-viruddha* is, 'Soul is eternal, because it is incorporeal, like the bull.' (The bull is neither eternal, nor incorporeal); and no relation can be established between the probans and the probandum; and of *yuktiviruddha*, 'A Brāhmaṇa must observe the duties of a Kṣatriya, and a Kṣatriya must go in for meditation'. It can be seen that the arguments here are of a very crude stage and can hardly be said to be strictly logical or illogical. *Yukti-viruddha* may be said to correspond to *bādhita* or the *viruddha* as given by the *Nyāya-sūtra*.[9]

The *Tarkaśāstra*, an early Buddhist work, mentions *asiddha* (' A horse is coming, because the horns can be seen '—a horse does not have horns), *anaikāntika* (' A cow is coming, because horns can be seen '—other animals also have horns) and *viruddha* (' It is night, because it has dawned ').[10]

Stcherbatsky has given the following table of Diṅnāga's *hetvābhāsas*, based on his *Nyāyamukha* and *Hetucakra* (See Buddhist Logic, Vol. I. p. 323) :

Uncertain (*Anaikāntika*) — Right — Uncertain (*Anaikāntika*)

Inverted (*Viruddha*) — Inverted (*Viruddha*)

1 All S and All D — Over-wide (*Sādhāraṇa*)	4 All S and No D — Right	7 All S and Some D — Over-lapping (*Savyabhicāra*)
2 No S and All D — Contradictory (*Viruddha*)	5 No S and No D — Over-narrow (*Asādhāraṇa*)	8 No S and Some D — Contradictory (*Viruddha*)
3 Some S and All D — Over-lapping (*Savyabhicāra*)	6 Some S and No D — Right	9 Some S and Some D — Over-lapping (*Savyabhicāra*)

Uncertain (*Anaikāntika*) — Uncertain (*Anaikāntika*)

S—Presence in similar instances (*sapakṣa*)
D—Presence in dissimilar instances (*vipakṣa*)

Diṅnāga's classification is based on the three-fold rule for a valid probans, viz. *pakṣe sattvam eva* (necessary presence in the subject), *sapakṣe eva sattvam* (presence in the homologue only) and *vipakṣād vyāvṛttir eva* (necessary absence in the heterologue). The *Nyāyapraveśa* of Śaṅkarasvāmin explicity lays down these three essential conditions, and Dharmakīrti reproduces them, making them more precise

Suguira states the principle of division of the fourteen fallacies of the reason said to be recognised by Diṅnāga. "Dinna enumerated fourteen fallacies of the reason. These he classified into three groups with reference to the phases of the *hetu* (i.e. *trairūpya*, *pakṣe-sattva*, etc.). The first four are those which are defective in the first phase of the *hetu*, the next six are those which are defective in either the second or the third phase, and the last four are those which are defective in both the second and the third phases."

From this it is clear that Diṅnāga recognised the *asiddha*, though it is ignored in the *hetu-cakra* (wheel of logical reasons). Of the remaining ten fallacies, the wheel provides a place for seven which depend on the formal relations of the the *hetu* to the *sapakṣa* and the *vipakṣa*; but only six of these figure in the list of fourteen fallacies of the reason. The four not accounted for in the wheel (—other than the four *asiddha-*) are the three varieties of *viruddha* where the *hetu* is inconsistent with the *pakṣa*, with the implications of the *pakṣa* and with the implications of the *sādhya* (major term or probandum); and (among the *aniścita* or uncertain), the *viruddhāvyabhicārin* (antinomic reason which corresponds to *prakaraṇa-sama* or *sat-pratipakṣa*).[11]

As Stcherbatsky[12] says, the infringement of the rule of *pakṣe sattva* 'presence in the subject or reference of a logical construction to a point of reality', represents a fallacy against reality. A reason which fails in respect of this rule pertaining to reference to reality is called *asiddha* (unestablished or unreal). A reason which fails in respect of the necessary dependence on the probandum represents not a fallacy of

reality, but that of consistency—*anaikāntika* (inconclusive) and *viruddha* (contrary). It is the latter class that are the logical fallacies in the strictest sense and it is in order to establish their number and system that Diṅnāga has devised his *hetu-cakra.*

Four varieties of *asiddha* are recognised by Diṅnāga and Śaṅkarasvāmin :

(*a*) When the *hetu* is recognised as *asiddha* (unreal or unestablished) by both parties in a discussion (*ubhayāsiddha*); e.g. 'Word (*śabda*) is non-eternal, because it can be perceived by the eye' (—The reason is *asiddha* for both parties, the Mīmāṁsaka who maintains the eternality of word, and the other party who denies it).

(*b*) When it is not conceded by one of the parties (*anyatarāsiddha*); e.g., 'Trees are animate beings, because they die when the entire bark is hewn off' (—The probans is not accepted by the opponent who defines death as extinction of sensations, sense-organs, etc.—such a death not occurring in the case of trees). Or supposing an adherent of the Sāṁkhya system wishes to prove that the emotions, pleasures, etc. are unconscious, and adduces as a reason the fact that they have a beginning, or are impermanent, this argument is *asiddha* for the the proponent himself.

(*c*) If doubt prevails regarding the very fact adduced as a reason (*svātmanā sandigdha*), or regarding its localisation *āśrayaṇāsiddha*), the reason is *asiddha* (of the *sandigdhāsiddha* type); for instance, when something is suspected to represent not smoke but vapour and the like, and is yet adduced as a proof for the inference of fire; or when one argues 'There is a peacock in this case, because we hear its cries,'—as there can be a mistake regarding the direction from which the cry comes.

(*d*) When the subject is not a reality, the probans will be *asiddha* (*dharmyasiddha*); e.g. when the omnipresence of the soul is deduced from the fact that its attributes may be apprehended everywhere (—soul is a non-entity for the Buddhists) (See *Nyāyapraveśa*, p. 3 and *Nyāyabindu*, III. 59–67).

Diṅnāga and Śaṅkarasvāmin recognise six varieties of *anaikāntika*—

(*a*) When the probans subsists in all similar and in all dissimilar instances (All S and D); e.g. 'Word is eternal, because it is cognisable' (*śabdo nityaḥ, prameyatvāt*).

(*b*) When the probans is present in some *sapakṣas* and in all *vipakṣas* (some S and all D); e.g., Word is not produced by conscious effort because it is non-eternal. (The probans non-eternality is present in some *sapakṣas* like lightning, and is present in all *vipakṣas*).

(*c*) When the probans is present in all *sapakṣas* and in some *vipakṣas* (All S and some D); e.g. 'Word is produced by conscious effort, because it is non-eternal.' All that is non-eternal is not produced by effort; thus the probans 'non-eternality' is found in all *sapakṣas*, and also in some *vipakṣas* that are not produced by effort and yet are non-eternal (e.g. lightning).

(*d*) When the *hetu* is present in some *sapakṣas* as well as in some *vipakṣas* (Some S and Some D); e.g. 'Word is eternal because it is incorporeal' (—atoms are eternal and are corporeal; whereas motion which is incorporeal is non-eternal).

(*e*) When the probans is present in only the *pakṣa* but neither in the *sapakṣa* nor in the *vipakṣa* (No S and No D); e.g. 'Word is eternal, because it is audible'.

The sixth variety of *anaikāntika* recognised by Diṅnāga and Śaṅkarasvāmin is *viruddhāvyabhicārin* (contrary, but not discrepant, antinomical); but before we discuss that, it may be noted that Dharmakīrti has recognised two more varieties of *anaikāntika* :

[1] Where the condition of necessary absence in dissimilar instances is doubtful : (*i*) when the condition *vipakṣād vyāvṛttir eva*' or necessary absence in heterologues is uncertain; e.g. 'X is non--omniscient, because he is endowed with speech'. The reverse proposition 'An omniscient person does not resort to speech' cannot be proved by experience, nor can

it be deduced from incompatibility with speech, because there is no contradiction between omniscience and the faculty of speech, this being a matter of doubt since an omniscient person is a supra-empirical entity; (*ii*) when one of the two forms or conditions (presence in similar cases only and necessary absence in dissimilar cases) is wrong and the other doubtful; e.g. ' X is omniscient because he possesses the faculty of speech (*sarvajñaḥ kaścid vaktṛtvāt*). It is wrong to say that one who is not omniscient does not have the faculty of speech. And the positive concomitance, viz. One who is omniscient has the faculty of speech is uncertain, as omniscience being inaccessible to empirical experience, it is uncertain whether the gift of speech coexists with it or not.

[2] When there is doubt regarding these same two conditions of the reason; e.g. The living body is endowed with a soul, because it possesses breath, etc. (*sātmakaṁ jīvaccharīraṁ prāṇādimattvāt*—NyB., III. 99). There may be similar and dissimilar instances, objects possessing a soul and objects not possessing it, and this feature may be present somewhere among living and non-living things. But the necessary connection of the one class with the presence of the soul and of the other with its absence is not established. Even admitting that the soul exists, the presence of the reason in similar instances only and its necessary absence in all dissimilar instances are uncertain. Neither can we affirm on such grounds the necessary connection of the soul with a living body nor can be deny it. (It can be seen that Dharmakīrti's treatment of the problem is purely logical. See *Nyāyabindu.*, III, 95–110).

(*f*) Diṅnāga and Śaṅkarasvāmin, as said above, recognise one more variety of *anaikāntika* viz. *viruddhāvyabhicārin* (contrary but not discrepant), corresponding to the *sat-pratipakṣa* of the Nyāya school. Dharmakīrti does not mention this as he believes that it cannot occur in the process of inference.[13] Dharmottara explains that it is a contrary (*viruddha*) reason because it proves the reverse of a fact established on

other grounds, and at the same time it is a right reason as it is concomitant with its own special probandum. Thus it is contrary and right at the same time. Now a reason simultaneously right and wrong cannot occur in the process of reasoning. The proper domain of inference or of logic in general is the three-fold connection (identity, effect, non-apprehension) as established by positive evidence. Since real inference alone is his subject-matter, says Dharmakīrti, he cannot deal with a reason which is at once right and wrong. A reason which is right and contrary is not something established on the ground of real facts, hence it should be omitted in logical discussions. What is meant is that though in the course of everyday thinking we can draw fallacious conclusions, we cannot draw two diametrically opposed conclusions. Diṅnāga has mentioned this sub-variety of *anaikāntika* as a mistaken argument establishing two contrary facts, since such arguments occur in dogmatic systems where inference concerns metaphysical problems and is founded on dogma rather than on unbiassed observation of real facts.[14] There are non-empirical or supra-empirical subjects in metaphysical theories which afford full scope for such arguments, e g. the problem of the reality of universals. When the investigation of such problems is undertaken, dogmatical argument flourishes.* Diṅnāga has mentioned the *viruddhāvyabhicārin* as a special variety of fallacy in connection with such dogmatic or metaphysical problems alone. It often happens that promoters of metaphysical systems are mistaken and obstinately ascribe to entities such attributes as are incompatible with their nature. But when an argument is founded on the properly observed real condition of things, that is to say, when a case of identity, effect or non-apprehension is thus established, there is no room for contradiction. Illustrative of the *viruddhāvyabhicārin* are the following two contrary deductions—(*i*) A thing which is simultaneously inherent in different objects, wheresoever they be situated, must

* This speaks a lot for the critical tendency of Dharmakīrti's Buddhist Philosophy.

be ubiquitous, just as *ākāśa* (ether); *sāmānya* (universal) is simultaneously inherent in different objects found everywhere (Hence *sāmānya* must be ubiquitous). (*ii*) If something perceptible is not perceived in a place, it is absent there, e.g. an absent jar; a universal though (supposed to be) perceptible is not perceived in the intervals between the particulars (Hence it is absent there, and so is not ubiquitous).

These two contradict each other and thus produce an uncertain conclusion. But such contradiction is not possible in respect of a real fact (See NyB., III, 112–121).

Four varieties of *viruddha* are recognised by Diṅnāga and Śaṅkarasvāmin. When the probans is absent in *sapakṣa* and present in *vipakṣa*, it is called *viruddha* (contrary) as it proves the contrary of what it is meant to prove. Diṅnāga and Śaṅkarasvāmin recognise four sub-varieties of *viruddha* according as the *hetu* is contrary to the *sādhya* or to the implied or the concealed *sādhya*, to the *pakṣa* or to the implied *pakṣa*. Of these the probans which is contrary to the implied *sādhya* is contrary to the principles or tenets of the school by which it is employed and so is called *iṣṭavighātakṛt* (demolishing one's tenets). Dharmakīrti says that in the case of *viruddha*, the two conditions of presence in *sapakṣa* only and necessary absence in the *vipakṣa* are reversed, and the probans is present in the *vipakṣa* and absent in the *sapakṣa*, e.g. 'Word is eternal, because it is brought about by effort'. This includes the *iṣṭavighātakṛt* of Diṅnāga, which contradicts a tacitly admitted principle.* The illustration given by the *Nyāyapraveśa* is : 'The sense of vision and the like are serviceable to some being, because they are composite things, like a bed, chair,etc.' (*parārthāś cakṣurādayaḥ saṅghātatvāt, śayanāsanādyaṅgavat*). It is a contrary reason because it proves the reverse of the principle admitted by the proponent; it proves the composite nature of the soul (which is contrary to the Sāṁkhya view of soul being pure consiousness). (What is of service to or effects another, produces, according to the Buddhist, a change

* Compare the view of the *Nyāya-sūtra* regarding *viruddha*.

in the latter which must therefore be composite as a simple thing cannot change.—See Dharmottara's commentary on NyB. III.91). Diṅnāga mentions *iṣṭavighātakṛt* as a separate sub-variety of *viruddha*; but Dharmakīrti does not do so since it also proves the reverse of the *sādhya* as there is no material difference between an expressed and an intended *sādhya* (See NyB., III. 83–94).[15]

The concealedly contrary reason is met with very frequently in philosophical discussions.

An example of the *hetu* being contrary to the *pakṣa* is '*Bhāva* (existence, *sattā*) is not substance or quality or action because it resides in one substance and is present in quality, and action, like *sāmānya-viśeṣa* (generality-cum-particularity)'. This also proves the *abhāva* (negation) of *bhāva* (existence). This amounts to sublation of the essence of the *pakṣa* or the subject [Compare Kumārila's illustration, "*Samavāya* (inherent relation) is separate from substance, etc. because it is the ground of the notion of a thing being at a particular place, like conjunction of things as is expressed in 'here is the jar'." The example shows that locality is an affair of *saṁyoga* (conjunction), so what is proved is *saṁyoga* and not *samavāya*. See *Ślokavārttika, Anumāna*, 100–101]. A case where the *hetu* is contrary to the implied *pakṣa* can also be illustrated by the instance given above, viz. ' *Bhāva* is not substance....' This proves that *bhāva* is not the cause of the notion of 'existence' (which is contrary to its being characterised as the cause of the notion of 'existence'). (Compare Ślv. *Anumāna*, 102–103). (See *Nyāyapraveśavṛtti*, pp. 28–30).

Praśastapāda was, as will be seen, very much open to other influences in the sphere of logic. He recognises four varieties of *hetvābhāsas*—*asiddha, viruddha, sandigdha* (=*anaikāntika*, excluding *asādhāraṇa* and *viruddha-avyabhicārin* or *satpratipakṣa*) and *anadhyavasita** (=*asādhāraṇa* and *viruddha-avyabhicārin*). Praśastapāda gives the same three conditions of a

* Praśastapāda says that *anadhyavasita* is meant by the term '*aprasiddha*' in VS., 3.1.1.10.

hetu, viz. *pakṣe sattva*, etc., specifically mentioning that the probans may or may not be present in all *sapakṣas* (*tat-samāna-jātīye sarvatra sāmānyena prasiddham*.—PB., pp. 115-116); that is to say, the extension of the probans may or may not be equivalent to that of the probandum; the probans may even be less extensive than the probandum. This necessitated the giving of a negative example (*vaidharmyeṇa dṛṣṭānta*) Diṅnāga had not made this clear, but Dharmakīrti while saying *sapakṣe eva sattvam* indicates that the probans may not be present in all *sapakṣas*. It may be noted that though Praśastapāda would accept 'Word is eternal, because it is audible' as a case of *asādhāraṇa*, i.e. *anadhyavasita hetvābhāsa*, he would nevertheless regard 'Word (*śabda*) differs from things, because it is audible' as valid. The distinction between the two instances is obvious. In the former, the *sādhya* 'eternal' is wider than the *pakṣa* or the *hetu*, which are of equal extension; whereas in the latter, the three are of like extension and so the conclusion is legitimate (See PB., pp. 120-121). *Bādhita* figures in Praśastapāda's classification as a kind of *viruddha* in the shape of the reason contradicted by the authoritative works of the school (*āgamabādhita*) (See PB., p. 119).[16]

Kumārila recognises three *hetvābhāsas*—*asiddha*, *anaikāntika*, *viruddha* (*Ślokavārttika*, *Anumāna*, 75ff). Kumārila gives a six-fold division of *viruddha*—(*i*) *dharma-svarūpa-viruddha*, (*ii*) *dharmaviśeṣa-viruddha*, (*iii*) *dharmisvarūpa-viruddha*, (*iv*) *dharmiviśeṣa-viruddha*, (*v*) *dharma-dharmi-svarūpa-viruddha*, (*vi*) *dharma-dharmi-viśeṣa-viruddha* (See Ślv, *Anumāna*, 96ff).

In view of the Buddhist classification and Praśastapāda's classification of *hetvābhāsas*, it is interesting to note how the Naiyāyikas from Uddyotakara onwards attempted to equate *prakaraṇa-sama* of the *Nyāya-sūtra* and *sat-pratipakṣa*, *kālātīta* and *bādhita*, *viruddha* (—Gautama's *viruddha* being really equivalent to *āgamabādhita* or Diṅnāga' *iṣṭavighātakṛt*) and the later *viruddha*; *sādhyasama* was equated with *asiddha*, and further sub-divided.

Bhāsarvajña (early 10th cent.), an original writer of the Nyāya-Vaiśeṣika school open to other influences recognises the five *hetvābhāsas* that came to stay in the *Nyāya* of a later day, viz. *anaikāntika, viruddha, asiddha, prakaraṇasama* (= *satpratipakṣa*) and *kālātyayāpadiṣṭa* (= *bādhita*) and *anadhyavasita* (=*asādhāraṇa*). * He has given a nnmber of subdivisions of these. In fact this is characteristic of all the later logicians of the Nyāya-Vaiśeṣika school as they wanted to accommodate the *pakṣābhāsas, dṛṣṭāntābhāsas*, etc. of the other schools, which they did not recognise, within their scheme of *hetvābhāsas*. It is not necessary to give further details.

Most of the Jaina logicians also recognise three kinds of fallacies of reason—*anaikāntika, asiddha, viruddha*. Their treatment and divisions are on the whole the same as those of the Buddhists and need not detain us much here.[17] It may be noted that the Jaina logicians starting from Siddhasena Divākara have accepted *anyathānupapannatva* or incompatibility with the opposite or anything other than the probandum as the criterion of a valid probans, and reject the threefold canon of *pakṣe sattva*, etc. as superfluous (—as it is but an elaboration of *anyathānupapannatva*—) or even misguiding. Thus it would not be in accordance with their theory to accept these three classes of *hetvābhāsas* directly; they can recognise only one *hetvābhāsa* in the absence of the *anyathānupapannatva* of the *hetu*. Akalaṅka says accordingly that the *hetvābhāsa* occurring in the absence of this requirement of the *hetu* is classified differently as *viruddha, asiddha, sandigdha*—which are all elaborations of *Akiñcitara* (ineffectual probans) (See NyV., II 365 cd, 366 ab, 370 cd). Akalaṅka is inclined to classify *viruddha*, etc. under the major head of *akiñcitkara* (ineffectual) which is a general description of all the three *hetvābhāsas* as they are not competent to prove anything, though it may be noted that he has mentioned *akiñcitkara* over and above *viruddha*, etc. in his *Pramāṇa-saṅgraha*, 35–

* Śivāditya (10th cent), the author of the *Saptapadārthi*, also recognises these six varieties of *hetvābhāsas*.

38, 49. Māṇikyanandin following Akalaṅka recognises four *hetvābhāsas—hetvābhāsā asiddha-viruddhā'naikantikā'kiñcit-karāḥ—Parikṣāmukhasūtra*, VI. 21.

Akiñcitkara probans is that which operates in respect of what has already been established, or what is contradicted by other sources of knowledge like perception, etc. For example, "Word is audible because of 'wordness'" (—this is a well-known fact); 'Fire is cool, because it is a substance' (—this is contradicted by perception).[18] Now, *akiñcitkara* thus described is included in the fallacies of the thesis (*pakṣābhāsa*) by the Jaina logicians, so it is not necessary to include it among the fallacies of the probans (*hetvābhāsas*). Māṇikya-nandin himself seems to admit this and reconciles it with his own position by saying that this *hetvābhāsa—akiñcitkara—* should be mentioned while theoretically giving the definitions of *hetvābhāsas*, but experts at the time of debates and discussions find fault with each other in such a case on the ground of *pakṣa-doṣa* (fallacy of the thesis), and they need not recognise this (*lakṣaṇa evā'sau doṣo vyutpannaprayogasya pakṣa-doṣeṇaiva duṣṭatvāt—Parīkṣāmukhasūtra*, VI. 39). Vādi Devasūri has criticised this *hetvābhāsa* in his *Syādvādaratnākara*, p. 1230.

The Naiyāyikas do not recognise *pakṣābhāsas* (fallacies of the thesis), and *dṛṣṭāntābhāsas* (fallacies of the illustration), but accommodate these in their *hetvābhāsas*, whereas the Buddhist and the Jaina logicians and Praśastapāda and Kumārila recognise these. They seem to have been treated in imitation of the treatment of *hetvābhāsas*. It is difficult to say who originated the idea of *pakṣābhāsas*, etc.; perhaps the Bauddhas did it in furtherance of their treatment of the three conditions of a valid *hetu*.

A sound thesis is that which while being intended to be proved is not contradicted by perception etc. That which even while intended to be proved is contradicted by perception etc. is a fallacious thesis (*sādhayitum iṣṭo'pi pratyakṣādi-*

viruddhaḥ pakṣābhāsaḥ—NyP., p. 2). Śaṅkarasvāmin, the author of the *Nyāyapraveśa* has recognised nine kinds of *pakṣābhāsas*—(*i*) Thesis contrary to perception (*pratyakṣa-viruddha*), e.g. Word is not perceived by the sense of hearing; (*ii*) Contradicted by inference (*anumāna-viruddha*), e.g. jar is eternal; (*iii*) Contradicted by ones own scripture or the authoritative texts of one's own system (*āgama-viruddha*). e.g. when an adherent of the *Vaiśeṣika* system affirms 'Sounds of speech are eternal entities (—Dharmakīrti includes this in *anumāna-viruddha*); (*iv*) Contradicted by popular belief (*loka-viruddha*), e.g. The skull of man is pure, because it is the limb of a living being, like conch-shell; (*v*) Contradicted by its own words (*svavacana-viruddha*), e.g. 'My mother is a barren woman' or 'inference is not a source of knowledge'; (*vi*) That of which the predicate is unknown or unrecognised (*aprasiddhaviśeṣaṇa*); for instance, when a Buddhist says to a Sāṁkhya, 'Sounds of speech are destructible'; (*vii*) That of which the subject is not recognised (*aprasiddha-viśeṣya*); for example, when a *Sāṁkhya* says to a Buddhist, 'Soul is sentient'; (*viii*) That of which both the subject and the predicate are not recognised (*aprasiddhobhaya*); for example, when the Vaiśeṣika says to a Buddhist, 'Soul is the inherent cause of pleasure etc; (*ix*) That which is well known (*prasiddha-saṁbandha*), e.g. Word is audible (See *Nyāyapraveśa*, pp. 2–3). *vi-viii* are of a dogmatic type, so Dharmakīrti does not recognise them. He similarly does not admit *āgama-viruddha* and *loka-viruddha*; but includes *pratīti-viruddha* (contradicted by linguistic convention) among the *pakṣābhāsas*. An example of *pratīti-viruddha* would be—'The *Śasī* (rabbit-bearing luminary) is not the *candra* (moon).' Dharmakīrti thus accepts four *pakṣābhāsas*—*pratyakṣa-viruddha, anumāna-viruddha, svavacana-viruddha* and *pratīti-viruddha* (See NyB., III. 39-56).

Diṅnāga does not recognise the last four of the *pakṣābhāsas* given by Śaṅkarasvāmin in his *Nyāyapraveśa*, and so it seems that his list of fallacies is limited to twenty-nine, whereas Śaṅkarasvāmin recognises thirty-three fallacies (nine of the thesis, fourteen of the reason and ten of the example).

Among the Jaina logicians, Siddhasena recognises five *pakṣābhāsas*—that which is known, and that which is contradicted by perception or inference or popular belief or own expression.[19] Māṇikyanandin and Vādi Devasūri, perhaps following Śaṅkarasvāmin, recognise the following *pakṣābhāsas*—*pratyakṣa-viruddha, anumāna-virudda, āgama-viruddha, loka-viruddha, svavacana-viruddha.* Of course, it is acceptable to all that a proposition which is not intended to be proved (e.g. 'Word is non-eternal' for a *Mīmāṁsaka*), or which is an established fact (e.g. Sound is audible) cannot be a sound thesis; these are *pakṣābhāsas*.[20] Hemacandra has recognised, over and above these five, the *pratīti-viruddha* (contradicted by linguistc convention) of Dharmakīrti (See PM. I. 2.14).

Praśastapāda has recognised these five *pakṣābhāṣas* or *pratijñābhāsas*—contradicted by perception, inference, own scripture, accepted system of thought and own expression. 'A Brāhmaṇa should drink wine' is given as an illustration of *āgamavirodhin*; and 'Words do not convey a meaning' of *svavacana-virodhin.*[21] Kumārila also accepts these *pakṣābhāsas* —contradicted by any of the six *pramāṇas* (recognised by the *Mīmaṁsakas*), *Āgama-viruddha* including self-contradiction (e.g. 'My mother is barren', or stating 'I have all my life been silent') and contradiction by well-established facts; he also recognises a thesis that is well-known as a *pakṣābhāsa* as there is no doubt or curiosity about it and so inference is not possible with regard to it (See *Ślokavārttika*, *Anumāna*, 56ff). Māṭhara in his commentary on *Sāṁkhya Kārikā* 5 refers to nine *pakṣābhāsas*, but does not enumerate or illustrate them. Could they be the same as the nine given in the *Nyāyapraveśa*?

Thus, a sound thesis or proposition should not be (*a*) a fact already proved, (*b*) a fact, although not yet proved, only adduced as a reason (i.e. not intended to be proved then), (*c*) a fact which the disputant himself does not intend to prove at the moment; (*d*) a fact contradicted by perception, etc. It is a fact which the disputant himself intends to

establish, which he himself admits and which is not internally impossible. It is not necessarily a fact explicitly stated; for instance, the argument : 'The sense of vision and other sense organs are to be used by someone else, because they are composite things, just like beds, chairs, etc (made for the use of man).' Here the intention is to prove that the senses are the organs of the soul, though this is not expressly stated (see NyB., 49–56).

Coming to fallacies of example, when an example has been given for illustrating the general proposition, if it is found to be incapable of fulfilling its function, it is a fallacious example (*nidarśanābhāsa*, *udāharaṇābhāsa* or *dṛṣṭāntābhāsa*). It may be noted that the illustration is one which is acceptable in the same way to both the parties, or to the expert and the ordinary man (*Laukika-parīkṣakāṇām yasmin·narthe buddhi-sāmyaṁ sa dṛṣṭāntaḥ*—NS., 1.1.25).

The *Nyāyapraveśa* mentions and illustrates five fallacious positive examples and five fallacious negative ones according as the syllogism is expressed positively or negatively : Fallacious positive examples—

(*i*) Deficient in respect of the probans (*sādhanadharmāsiddha*), e.g. words are eternal, because they are incorporeal, like atoms (—atoms are eternal but not incorporeal).

(*ii*) Deficient in respect of the predicate or the probandum (*sādhyadharmāsiddha*); e.g. Words are eternal because they are incorporeal, like the intellect (—intellect is incorporeal but not eternal);

(*iii*) Deficient in respect of both (*ubhayāsiddha*); it is two-fold according as it is (*a*) existing or real, and (*b*) non-existing or unreal. For instance, (*a*) Words are eternal, because they are incorporeal, like jar (—jar is neither eternal nor incorporeal; it is a real entity); (*b*) Words are eternal, because they are incorporeal, like *ākāśa* (—the Buddhists do not regard *ākāśa* as a real entity so it is necessarily *ubhayāsiddha*);

(*iv*) Where positive concomitance is wanting (*ananvaya*)—(*a*) either because it is absent (*ananvaya*), e.g. Whosoever speaks is subject to passions, like X; (*b*) or because it is not expressed (*apradarśitānvaya*), e.g. Words are impermanent, because they are products, like a jar [—here the positive concomitance of the *hetu* and the *sādhya* is not stated, but only their co-existence (*sahabhāva*) is said to belong to the *dṛṣṭānta*; that is to say, the major premise is not stated]. The *Nyāyapraveśa* mentions only the latter; the *Nyāyabindu* (III. 127) mentions both.

(*v*) Where the positive concomitance is enunciated inversely and therefore wrongly (*viparītānvaya*); for instance, instead of saying 'Whatever is a product is impermanent', one says 'Whatever is impermanent is a product'.

We have similarly five fallacious negative examples :

(*i*) Where the predicate or probandum is not absent (*sādhyāvyāvṛtta*); e.g. Words are eternal, because they are incorporeal, unlike atoms; whatever is non-eternal is found to be corporeal, as for illustration, atoms (—atoms are devoid of incorporeality but are not devoid of eternality, the probandum).

(*ii*) Where the probans is not absent (*sādhanāvyāvṛtta*), e.g. Words are eternal, because they are incorporeal, unlike action...(—action is devoid of eternality but not devoid of incorporeality);

(*iii*) Where neither is absent; e.g. Words are eternal, because they are incorporeal, unlike *ākāśa* (—when the argument is addressed to one who regards *ākāśa* as real and therefore as one which is not devoid of eternality and incorporeality);

(*iv*) Where the negative concomitance is not stated but only the absence of the characters of the probans and the probandum is said to belong to the example (*dṛṣṭānta*) (*avyatireka*); for instance, instead of saying 'What is not eternal, is not incorporeal, e.g. jar', if one simply says,

'Corporeality and non-eternality are both present in jar,' it is a case of *avyatireka*, as the negative concomitance is not enunciated Dharmakīrti recognises two distinct sub-divisions of *avyatireka—avyatireka* (wherein the negative concomitance is not proved), and *apradarśita-vyatireka* (wherein it is not enunciated). The *Nyāyapraveśa* mentions only the latter. An example of the former would be : "He is not free from passions, because he can speak; he who is free from passions cannot speak, as for example a piece of stone." (Here the example is no proof for the negative concomitance 'Everyone who is free from passions does not speak' (NyB., III. 134–135).

(*v*) Where the negative concomitance is enunciated inversely (*viparīta-vyatireka*); for instance, instead of saying 'whatever is not eternal is found to be not incorporeal', one says, 'Whatever is not incorporeal is found to be not eternal (see *Nyāyapraveśa*, pp. 5–7).

Dharmakīrti gives the same *dṛṣṭāntābhāsas*, but adds a set of three based on uncertainty, wherein the presence (or absence in the case of negative examples) of the probandum or the probans or both is uncertain :

(*i*) Where the presence of the probandum is uncertain (*sandigdha-sādhyadharma*), e.g. This man is subject to passions, because he can speak, like a man in the street. (It is uncertain whether the man in the street is subject to passions).

(*ii*) Where the presence of the probans is uncertain (*sandigdha-sādhana-dharma*), e.g. This man is mortal, because he is subject to passions, like a man in the street.

(*iii*) Where the presence of both is uncertain, e.g. This man is non-omniscient, because he is subject to passions, like a man in the street (Omniscience is a transcendental quality which can neither be affirmed nor denied, hence it is uncertain, as also the fact of the man's being subject to passions).

Similarly, in respect of fallacious negative examples, the following three are recognised :

(*i*) Where the absence of the probandum is uncertain (*sandigdha-sādhya-vyatireka*), e.g., "Kapila and others are not omniscient because their knowledge cannot stand the test of omniscience; omniscient is a man who can teach astronomy, as for example, Ṛṣabha, Vardhamāna and others". Hence the absence of the predicate 'non-omniscience' is subject to doubt.

(*ii*) Where the absence of the probans is uncertain (*sandigdha-sādhana-vyatireka*), e.g., A Brāhmaṇa possessing the knowledge of the three *Vedas* should not trust X, because he might be subject to passions; whoever is to be trusted is not subject to passions, as for example, Gautama and other promoters of legal codes (—The absence of passions in Gautama and others is uncertain).

(*iii*) Where the absence of both is uncertain (*sandigdhobhaya-vyatireka*), e.g., Kapila and others are not free from passions because they are subject to acquisitiveness and avarice; a person who is free from passions is neither acquisitive nor avaricious, as for example, Ṛṣabha and others. (The absence in Ṛṣabha and others of both freedom from passions and freedom from acquisitiveness and avarice is uncertain). (See *Nyāyabindu*, III. 125–136).

Moreover, as seen above, Dharmakīrti has recognised two distinct varieties each of *ananvaya* and *avyatireka* according as the positive or negative concomitance is not established or is not enunciated. Thus Dharmakīrti recognises nine varieties each of fallacious positive example and of fallacious negative example (—See *Nyāyabindu*, III. 125–136). Praśastapāda has mentioned six fallacious examples (which he terms *nidarśanābhāsa*) each of positive and negative examples, his additional *nidarśanābhāsa* in either case being *āśrayāsiddha*, in which the example is a non--entity. Illustrations of *āśrayāsiddha* in

positive and negative examples are : (*a*) Word is eternal, because it is incorporeal; whatever is incorporeal is eternal, as for example, darkness (–Darkness, according to some schools of philosophy, is a non-entity, so the question of its being an illustration of the positive concomitance does not arise at all). (*b*) Word is eternal, because it is incorporeal, whatever is non-eternal is not incorporeal, as for example darkness.[22] Kumārila Bhaṭṭa has mentioned the same *dṛṣṭāntābhāsas* as Śaṅkarasvāmin, the author of the *Nyāya-praveśa*; only like Dharmakīrti he recognises two varieties each of *ananvaya* and *avyatireka* according as the *vyāpti* is not proved or is not stated (See *Ślokavārttika, Anumāna*, 107 ff). The *Nyāya-sāra* of Bhāsarvajña adopts the same *dṛṣṭāntābhāsas* as Praśastapāda and mentions four additional varieties implying uncertainty under each of the heads of fallacious positive and negative examples *sandigdha-sādhya, sandigdha-sādhana, sandigdhobhaya, sandigdhāśraya, sandigdhasadhyāvyāvṛtta, sandigdha-sādhanāvyāvṛtta, sandigdhobhayāvyāvṛtta* and *sandigdāśraya* (—an example of *sandigdhāśraya* or example whose reality is uncertain being 'Devadatta's son who is yet to be born') (See *Nyāyasāra*, pp. 9-11). Bhāsarvajña seems to have drawn upon both Praśastapāda and Dharmakīrti. The *sandigdha* variety is seen first mentioned in Dharmakīrti's *Nyāyabindu*. Jayanta seems to have felt the urgency in logic of recognising the fallacies of example. He recognises *sādhya-vikala, sādhana-vikala, ubhayavikala ananvaya, viparitānvaya* (in the case of positive examples), and *sādhyāvyāvṛtta, sādhanāvyāvṛtta, ubhayāvyāvṛtta, avyatireka, viparīta-vyatireka* (—negative examples—), stating that the first three in each case are material fallacies (*vastudoṣakṛta*) whereas the last two in each case are formal ones, due to a fault in the statement of the person putting forth the syllogism (*vacana-doṣakṛta*).[23]

Among the Jaina logicians it seems that Siddhasena was the first to give an exposition of *dṛṣṭāntābhāsas*. He has not explicitly mentioned, but he seems to be recognising the same *dṛṣṭāntābhāsas* as Dharmakīrti has recognised, excepting

the three connected with positive concomitance—*ananvaya, apradarśitānvaya, viparītānvaya*—and the three connected with negative concomitance — *avyatireka, apradarśita-vyatireka, viparīta-vyatireka*—, perhaps because he thought that these arise due to the fault of the man and not of the matter or thought; that is to say, they are only formal and not material, or because he thought that they could be accomodated in the scheme of *hetvābhāsas.*[24] Dharmakīrti's list is adopted in the *Pramāṇa-naya-tattvālokālaṅkāra* (VI. 59-79) of Vādi Devasūri. Māṇikya-nandin, on the other hand, has recognised four varieties each of fallacious positive and negative *dṛṣṭāntas*—deficient in predicate or probandum, probans, both, and stating the positive concomitance inversely (*viparītānvaya*); and those in which the probandum, probans and both are not absent, and that in which the negative concomitance is stated inversely (*viparīta-vyatireka*) (—See *Parīkṣāmukhasūtra*, VI. 40-45). Hemacandra's treatment of *dṛṣṭāntābhāsas* is on the same lines as Dharmakīrti's; only he does not regard *ananvaya* and *avyatireka* as distinct varieties as he believes that all *dṛṣṭāntā-bhāsas* fall under these two major heads which therefore should not be classified as varieties. He thus recognises eight varieties in each class of *dṛṣṭāntābhāsas* according as it is based on similarity or dissimilarity (i.e. is positive or negative). (See *Pramāṇa Mīmāṁsā* II. 1. 22-27 and *Vṛtti*).

Māṇikyanandin and Vādi Devasūri recognise other *ābhāsas* or fallacies also—*prayogābhāsa* (fallacy of syllogism), *upanayābhāsa* (fallacy of application), *nigamanābhāsa* (fallacy of conclusion), etc., but these need not detain us as the first depends on the number of members or factors (*avayavas*) one recognises in a syllogism, and the others are more like slip of the tongue or due to sheer carelessness of the proponent (See PMS., VI. 47-50; PNTL., VI. 80-81).

The recognition of the classes of fallacies other than *hetvābhāsas* and the further classification of *hetvābhāsas* appear to be characteristic of the period represented by Praśastapāda and Śaṅkarasvāmin, the author of the *Nyāya-*

praveśa. Uddyotakara makes fun of the latter by saying that in this way by different combinations he could give a list of 2032 *hetvābhāsas* (*Nyāyavārttika*, 1.2.4). The followers of the Nyāya school include the generally accepted *pakṣābhāsas* in the *bādhita* type of *hetvābhāsa*. Udayana has shown in his *Bodhasiddhi*, II. 24, how the *dṛṣṭāntābhāsas* (both material and formal) can be included in the *hetvābhāsas*. The *dṛṣṭāntābhāsa sādhanavikala* can be included in *asādhāraṇa-anaikāntika hetvābhāsa*, *sādhya-vikala* in *viruddha*, *ubhaya-vikala* in *vyāpyatvāsiddha*; *āśrayāsiddha* can be similarly regarded as a case of *vyāpyatvāsiddha*. As regards the negative *dṛṣṭāntābhāsas*, *sādhyāvyāvṛtta* can be regarded as a case of *asādhāraṇa*, *sādhanāvyāvṛtta* of *viruddha*, and *ubhayāvyāvṛtta* and *āśrayāsiddha* as cases of *vyāpyatvāsiddha* of the negative type (i.e. where the negative concomitance is not established). In cases where the positive or negative concomitance is wrongly stated, the reason can be said to be vitiated on account of its wrong expression though it is itself a good reason. When the concomitance, positive or negative, is not explicity stated, the reason fails to prove its point. These can be included in *vyāpyatvāsiddhi*. Thus all these can be included in the *hetvābhāsas*, and it is not necessary to regard them as separate fallacies due to a wrong or fallacious example or due to wrong expression or non-expression.[25]

In Veṅkaṭanātha's view, there are, as a matter of fact, only two classes of *hetvābhāsas* — a probans that is not invariably concomitant with the probandum, and that which does not subsist in the subject (*pakṣa*). The *hetvābhāsas* that are generally accepted can be included in these; for instance, *asiddha* is a case of the probans not subsisting in the *pakṣa*, and *anaikāntika* and *viruddha* are cases of failure of invariable concomitance; *bādhita* involves both these; and so also *prakaraṇasama*.[26]

Jayatīrtha of the Madhva school regards *pakṣābhāsas* and *dṛṣṭāntābhāsas* as fallacies which should be regarded as distinct from *hetvābhāsas*.[27] Vyāsatīrtha (16th cent. A.D.),

the author of the *Tarka-tāṇḍava,* also of the Madhva school, recognises fallacies of the thesis (*pratijñā*), probans (*hetu*) and example (*dṛṣṭānta*). He recognises primarily two classes of *hetvābhāsas,*—due to the *asiddhi* of the *hetu,* and due to the relation of invariable concomitance not being established.[28] (*hetoḥ sādhyapramājananasāmarthyābhāvo hetudoṣaḥ. sa dvividhaḥ asiddhir avyāptiś ceti. samucitadeśe hetor abhāvo'siddhiḥ. vyāpti-viraho avyāptiḥ.*—TT., Vol. IV, p. 222).

It can be said in general that all the schools other than the Nyāya school thought it necessary to recognise the *pakṣābhāsas* and the *dṛṣṭāntābhāsas*—especially the latter—as fallacies of reasoning over and above the *hetvābhāsas.* In this they were perhaps following the lead of the Buddhist logicians. The Vaiśeṣikas and the Mīmāṁsakas also recognised these fallacies. Even Naiyāyikas like Jayanta felt the urgency to recognise *dṛṣṭāntābhāsas* and give a detailed exposition of these, though they might have said that these could be included in the *hetvābhāsas.*

It can be seen that these fallacies as enumerated in the different books of logic are such as can be readily understood and admitted as they result from the violation of the principles of cogency. Yet their codification helps the detection of these and facilitates reasoning, especially formal reasoning, the rules of which are generally expected to be rigidly observed so as to avoid any bungling or confusion on the part of the debaters.

Though the Nyāya school has come to be looked upon as the principal source of logical theories par excellence, yet the exposition in this chapter, as in the previous chapters, shows that there were many other theories, not entertained by the Nyāya school, but prevalent among the various schools. Some of these are common to the Buddhist, the Jaina and the Vaiśeṣika, some common to the Buddhist and the Jaina or the Sāṁkhya and so on. This shows that there was live thinking among the different school-men about various aspects of theorising and they had their own views independently of the Nyāya school.

We may note in passing, in order to complete the picture of fallacies, that logicians of the syncretist school regard errors in definitions as being closely connected with *hetvābhāsas*. A definition is said to be too general or wide or to suffer from *ativyāpti* when it includes the characteristics which are found in things other than the thing defined. 'The cow is a horned animal' is an instance in point. This can be compared with the *asiddha* in respect of concomitance (*vyāpyatvāsiddha*) or with the *sādhāraṇa* variety of *anaikāntika*. Or a definition may be too narrow (—the fault of *avyāpti*), as when a cow is defined as tawny, other cows being thus excluded. Or a definition may be impossible (—the fault of *asaṁbhava*); as for instance, when a cow is defined as whole–hoofed. These two faults correspond to the *asiddha* of the *bhāgāsiddha* and *svarūpāsiddha* types. *Asaṁbhava* can be said to correspond to *viruddha* also. A correct definition is defined by Vātsyāyana as that which states an attribute which differentiates what is defined from all other things (*Tatra uddiṣṭasya tattva-vyavacchedako dharmo lakṣaṇam*—NB., Introductory to NS., 1.1.3). This results in the definition of the schools being mostly reduced to the statement of the differentia of the definitum; and in many cases definition consists in the negation of certain attributes. Varadarāja has shown in his *Tārkikarakṣā* (pp. 75-76) that a definition (*lakṣaṇa*) is really a purely negative inference (*kevalavyatireki-anumāna*). For instance, '*gandhavatī pṛthvī*' = *itarabhinnā pṛthvī gandhavattvāt, yad na itarabhinnaṁ na tat gandhavat yathā jalam*'. A correct definition like a correct inference must be free from the faults of *ativyāpti*, *avyāpti* and *asaṁbhava* which, as shown above, can be said to correspond to *hetvābhāsas*.

NOTES

1 Savyabhicāra-viruddha-prakaraṇasama-sādhyasama-kālātītā hetvābhāsāḥ —NS. I.2.4; See also NyB. III. 57ff, *Nyāyāvatāra*, 22–23.

2 Anaikānto viruddhaś cā'py asiddhaḥ pratipakṣitaḥ,
kālātyayāpadiṣṭaś ca hetvābhāsās tu pañcadhā.
ādyaḥ sādhāraṇas tu syād asādhāraṇako' paraḥ,
tathaivā'nupasaṁhārī tridhā'naikāntiko bhavet.
yaḥ sapakṣe vipakṣe ca bhavet sādhāraṇas tu saḥ,
yas tūbhayasmād vyāvṛttaḥ sa tv asādhārano mataḥ.
tathaivā' nupasaṁhārī kevalānvayipakṣakaḥ.

—*Bhāṣāpariccheda*, *Anumānakhaṇḍa*, 71–74ab; See also *Siddhānta-Muktāvalī* on the above, and *Tarkasaṅgraha*, 52–57.

3 The author of the *Nyāyasūtra-vivaraṇa* shows how the *sūtra* can be made to yield the later view—Vādinā nyāyādibodhitasiddhāntaṁ tatpratijñātasādhyarūpam abhyupetyā'nūdya tad-dūṣaṇāya prayuktas tadvirodhī sādhyābhāvavyāpyaprakṛtahetur viruddha ity arthaḥ. prayukta ity anena pakṣavṛttitve satīti labhyate anyathā dūṣaṇānupapatteh. atha vā pratijñāyāṁ siddhasya pakṣasyānte sādhyam abhidhīyate tathā ca sādhyam abhyupetyoddiśya tat-sādhanāya prayukto yo vastugatyā sādhyābhāva-vyāpto hetuḥ sa viruddhaḥ. *Nyāyasūtra-vivaraṇa*, p. 52 (Reprint from the *Pandit*, Medical Hall Press, Benares, 1903).

4 Yady api prakaraṇasama-śabdo vyutpattyā sādhyaviśiṣṭena samānārthaḥ, tathāpi pravṛtti-nimittam asya satpratipakṣatvam—NVTT, p. 342.

5 See NVTT, p. 346.

6 Paramate tu kālātyayena yukto yasya hetor anurūpa ekadeśo hetuviśeṣaṇam iti yāvat sa kālātyayāpadiṣṭa iti yojanā. paramatenaiva nidarśanam āha...tad etat pañcāvayavaṁ vākyam upanyasya saṁyoga-vyaṅgyatvasya hetor ekadeśasya viśeṣaṇasya saṁyogasya vyaktikālātyayena hetvābhāsatām āha. ayam ahetur iti. sa punar ayam asiddha-viśeṣaṇatayā hetvābhāsaḥ sādhyasama eveti na pṛthag vācya iti sthūlatayā eṣa doṣo Bhāṣyakāreṇa nodbhāvitaḥ.—NVTT, p. 347.

7 Hetor apadeśasya hi sādhyasandeha-viśiṣṭaḥ kālaḥ, yathāhuḥ, nānupalabdhe na nirṇīte nyāyaḥ pravartate'pi tu sandigdha iti. pare'py āhuḥ sandigdhe hetuvacanād iti. yatra ca pratyakṣānumānāgamavirodho'nuṣṇo'gnir dravyatvād iti, aśrāvaṇaḥ śabdo guṇatvād iti ca, śuci naraśiraḥ-kapālaṁ prāṇyaṅgatvād iti ca, sa sarvaḥ pramāṇato viparīta-nirṇayena sandeha-viśiṣṭaṁ kālam atipatatīti so'yaṁ kālasyātyayenā'padiśyamānaḥ kālātīta iti....evaṁ vyavasthite Bhāṣyakāraḥ sūtraṁ svaparamataśliṣṭaṁ vyācaṣte, kālātyayena saṁśaya-kālātyayena yukto yasyārthaikadeśaḥ, dharmaviśiṣṭo hi dharmī hetor apadiśyamānasyā'rthaḥ, sa hy arthyate hetunā, tasyaikadeśaḥ sādhyadharmaḥ, sa dharmiṇi balavatā pramāṇena tad-viparītadharma-nirṇayaṁ kurvatā saṁśayakālam

atipātitaḥ, sa tādṛśo hetuḥ kālātyayāpadiṣṭaḥ kālātīta iti svamatenā'-syārthaḥ. atra ca pūrvam evodāhṛtam iti paunaruktyān nodāhṛtam. —NVTT, pp. 346-347.

8 Aprasiddho' napadeśaḥ asan saṁdigdhaś cā'napadeśaḥ. viṣāṇī tasmād aśvo viṣāṇī tasmād gaur iti.—VS. 3.1.10-12. (See also Candrānanda's commentary on these *sūtras* (edited by Muni Śrī Jambūvijayajī.—GOS).

9 Atha ke hetvābhāsāḥ. atrocyate..hetvābhāsānāṁ lakṣaṇāny aparimitāni saṁkṣepatas tv aṣṭāv eva. vāk-chalaṁ, sāmānya-chalaṁ, saṁśaya-samaḥ, kālātītaḥ, prakaraṇa-samaḥ, varṇya-samaḥ, savyabhicāraḥ, viruddhaḥ.—UH, p. 14. kiṁ nāma saṁśayahetvābhāsalakṣaṇam. ucyate. sthāṇor manuṣya-sādṛśyāt, rātrau taṁ dṛṣṭvā, eṣa sthāṇuḥ puruṣo veti vimarśah. ayaṁ saṁśaya-hetvābhāsa iti.—*Ibid*, p. 16. kaḥ savyabhicāraḥ. ucyate. yathā pañca viṣayā anityā indriyagrāhyatvāt. catvāri mahābhūtāny api tathā tasmād anityāni. atra dūṣaṇam. kūrmaroma lavaṇagandhaś ca nirābhāsamātraṁ manovijñānopalabhyatvāt kim anityam iti savyabhicāraḥ—*Ibid*, pp. 16-17. Atha ko nāma viruddhaḥ ucyate. viruddho dvividhaḥ. dṛṣṭānta-viruddho yuktiviruddhaś ca, yathā''tmā nityo'mūrtatvāt, vṛṣabhavat. ayaṁ dṛṣṭānta-viruddhaḥ. yukti-viruddho yathā, brāhmaṇasya kṣatrakarmānupālanaṁ mṛgayādiśikṣā ca, kṣatriyasya dhyāna-samāpattir iti yukti-viruddhaḥ. evaṁbhūtau dharmāv ajñā abuddhvaiva satyaṁ manyante.—*Ibid*, p. 17.

10 See TS., p. 40.

11 See *Indian Logic in the Early Schools*, pp. 223-224—H. N. Randle.

12 *Buddhist Logic*, Vol. I, p. 321.

13 Viruddhāvyabhicāry api saṁśayahetur uktaḥ. sa iha noktaḥ ? anumāna-viṣaye asaṁbhavāt.—NyB, III. 112-113.

14 Tasmād avastu-darśanabala-pravṛttaṁ āgamāśrayam anumānam āśritya tadarthavicāreṣu viruddhāvyabhicārī sādhanadoṣa uktaḥ.—NyB., III. 116.

15 For other details see *Nyāya-praveśa*, pp. 3-5 (GOS). Viruddhaś catuḥ-prakāraḥ. tad yathā. dharmasvarūpa-viparīta-sādhanaḥ (1), dharma-viśeṣa-viparītasādhanaḥ (2), dharmisvarūpaviparītasādhanaḥ (3), dharmi-viśeṣa-viparīta-sādhanaś (4) ceti. tatra *dharmasvarūpa-viparītasādhano* yathā. nityaḥ śabdaḥ kṛtakatvāt prayatnānantarīyakatvād veti. ayaṁ hetur vipakṣa eva bhāvād viruddhaḥ. *dharmaviśeṣaviparītasādhano* yathā. parārthāś cakṣurādayaḥ saṅghātatvāc chayanāsanādyaṅgaviśeṣavad iti. ayaṁ hetur yathā pārārthyaṁ cakṣurādīnāṁ sādhayati tathā saṁhatatvam api parasyātmanaḥ sādhayati. ubhayatrāvyabhicārāt. *dharmisvarūpa-viparītasādhano* yathā. na dravyaṁ na karma na guṇo

bhāvaḥ ekadravyavattvāt guṇakarmasu ca bhāvāt sāmānya-viśeṣavad iti. ayaṁ hi hetur yathā dravyādipratiṣedhaṁ bhāvasya sādhayati tathā bhāvasyābhāvatvam api sādhayati. ubhayatrāvyabhicārāt. *dharmi-viśeṣaviparītasādhano* yathā. ayam eva hetur asminneva pūrvapakṣe'-syaiva dharmiṇo yo viśeṣaḥ satpratyaya-kartṛtvaṁ nāma tadviparītam asatpratyayakartṛtvam api sādhayati, ubhayatrāvyabhicārāt.—NyP, p. 5. See also *Vṛtti*, pp. 28-31 on it.

16 For *hetvābhāsas* see PB, pp. 116-121 (Kashi Sanskrit Series, 1923).

17 Anyathā'nupapannatvaṁ hetor lakṣaṇaṁ īritaṁ,
tadapratīti-sandeha-viparyāsais tadābhatā.
asiddhas tv apratīto yo yo'nyathaivopapadyate,
viruddho yo'nyathāpy atra yukto'naikāntikaḥ.—*Nyāyāvatāra*, 22-23.
sa viruddho 'nyathābhāvād asiddhaḥ sarvathātyayāt,
vyabhicārī vipakṣe'pi siddhe'kiñcitkaro'khilaḥ.—*Pramāṇasaṅgraha*, 48 cd-49ab—Akalaṅka.

Asiddhaś cākṣuṣatvādiḥ śabdānityatvasādhane,
anyathā'sambhavābhāvabhedāt sa bahudhā smṛtaḥ 365.
viruddhā'siddha-sandigdhair akiñcitkara-vistaraiḥ. 366ab.
anyathā'nupapannatvarahitā ye tri-lakṣaṇāḥ. 370 cd.
akiñcitkārakān sarvāṁs tān vayaṁ saṅgirāmahe. 371 ab.

—NyV, II. See also *Parīkṣāmukhasūtra*, VI. 21-38; PNTL., VI. 47-57; PM., II. 1. 16-21.

18 Siddhe pratyakṣādi-bādhite ca sādhye hetur akiñcitkaraḥ. 35. yathā śrāvaṇaḥ śabdaḥ śabdatvād iti. 36. kiñcid akaraṇāt. 37. anuṣṇo'gnir dravyatvād ity ādau yathā kiñcit kartum aśakyatvāt. 38. Also, siddhe 'kiñcitkaro 'khilaḥ. 49.—*Pramāṇasaṅgraha*.

19 Pratipādyasya yaḥ siddhaḥ pakṣābhāso 'kṣaliṅgataḥ,
loka-svavacanābhyāṁ sa bādhito'nekadhā mataḥ.—*Nyāyāvatāra*, 21.

20 See PMS., VI. 12-20; PNTL., VI. 38-46. Vādi Devasūri has added 'etc.' —'Contradicted by perception,....own expression, etc.' (PNTL., VI. 40) and mentioned other *pakṣābhāsas* like contradicted by memory *(smṛti)*, contradicted by hypothetical reasoning *(tarka)*' in his *Syādvādaratnākara*.

21 Tatrā'numeyoddeśo'virodhī pratijñā......avirodhigrahaṇāt pratyakṣā'-numānābhyupagatasvaśāstra-svavacanavirodhino nirastā bhavanti. yathā'-nuṣṇo'gnir iti pratyakṣa-virodhī, ghanam ambaram ity anumāna-virodhī, brāhmaṇena surā peyety āgamavirodhī, Vaiśeṣikasya sat kāryam iti bruvataḥ svaśāstra-virodhī, na śabdo'rtha-pratyāyaka iti svavacana-virodhī—PB., pp. 114-115.

22 Anena nidarśanābhāsā nirastā bhavanti, tad yathā nityaḥ śabdo'mūrtatvāt, yad amūrtaṁ dṛṣṭaṁ tan nityaṁ yathā paramāṇur yathā karma yathā sthālī, yathā tamaḥ ambaravad iti, yad dravyam tat kriyāvad dṛṣṭam iti ca liṅgānumeyobhayā''śrayāsiddhā' nanugataviparītānugatāḥ sādharmya-nidarśanābhāsāḥ. yad anityaṁ tan mūrtaṁ dṛṣṭaṁ yathā karma, yathā paramāṇur yathā''kāśaṁ yathā tamaḥ ghaṭavad; yan niṣkriyaṁ tad adravyaṁ ceti liṅgānumeyobhayāvyāvṛttā'' śrayāsiddhāvyāvṛtta-viparītavyāvṛttā vaidharmya-nidarśanābhāsā iti.—PB, pp. 122-123.

23 See NM., II. p. 140; also p. 127 (KSS. 1936).

24 Sādharmyeṇātra dṛṣṭāntadoṣā nyāyavidīritāḥ.
apalakṣaṇa-hetūtthā sādhyādivikalādayaḥ.
vaidharmyeṇātra dṛṣṭānta-doṣā nyāvavidīritāḥ.
sādhya-sādhana-yugmānām anivṛtteś ca saṁśayāt.
—*Nyāyāvatāra* 24-25. See Siddharṣigaṇi's commentary on these stanzas. Akalaṅka also recognises *sādhya-vikala*, etc :
Sambandho yatra nirjñātaḥ sādhya-sādhana-dharmayoḥ.
sa dṛṣṭāntaḥ tadābhāsāḥ sādhyādi-vikalādayaḥ.—NyV., II. 380.

25 Virodhādi-nigrahasthānottīrṇasya hi sādhana-prayogasya caturddhā duṣṭatvaṁ sambhavati. hetuto yathā anaikāntikam ityādi. dṛṣṭāntato yathā sādhana-vikalam ityādi. tarkato yathā ātmāśrayetaretarāśrayādi. uktito yathā anupadarśitānvaya-viparyayopadarśitānvayādi....satyaṁ, hetvābhāsānām evaiṣa vicārataḥ prapañca iti pratipādanārthaṁ tu pṛthag anupādānam. kathaṁ sādhanavikale hi dṛṣṭānte asādhāraṇo hetuḥ syāt, sādhya-vikale ca viruddhaḥ, ubhaya-vikale vyāpyatvāsiddhaḥ, tathā āśrayāsiddhe'pi sādhyāvyāvṛtter asādhāraṇyaṁ sādhanāvyāvṛtter virodhaḥ ubhayāvyāvṛtte vyatireka-vyāpter asiddhiḥ, āśrayāsiddhe'pi tathā...duruktau tu vastuto'rthasya hetoḥ śobhanatvena uktyanusāreṇa duṣṭatvam eva. anupadarśitasya sato heturūpasyā' gamakatvāt. yathā-vacanaṁ ca tasya rūpasyā' pratīter iti....tasmād amīṣāṁ hetvābhāsa-prapañcatvāt pṛthag anupādānam.—BS., pp. 125-126. See also VV., pp. 19, 37; TR., pp. 236-239.

26 Avyāptā'pakṣadharmau dvau hetvābhāsau samāsataḥ.
tayor eva prapañcena syād asiddhyādikalpanā.
—NP., p. 271. See *Ibid*, pp. 271ff.

27 See PP., pp. 77-79.

28 See TT., Vol. IV. pp. 220ff.

CHAPTER 8

MAHĀVIDYĀ SYLLOGISMS

We have seen that debaters were advised to employ the *mahāvidyā* syllogisms when they could not find a weighty argument. These serve to confound the opponent, who if he be ignorant of their technique would be embarrassed and would not find an answer to them in which case the 'check' '*apratibhā*' could be employed. The use of *mahāvidyā* syllogisms would at least prevent the opponent from being declared victorious. Moreover, though the use of *mahāvidyā* was generally discouraged, at times the conceited debaters in order to show off agreed to debate by the method of *mahāvidyā* (*ata eva hi dṛptair mahāvidyādirītīnāṁ prayogo'bhyupagamyata iti*— NP., p. 199). We may therefore briefly consider the *mahāvidyā* syllogisms.

Most probably the *mahāvidyā* syllogisms were first formulated by Kulārka Paṇḍita in the eleventh century in his *Daśaślokī-mahāvidyā-sūtra* containing sixteen definitions or modes of formulation for sixteen *mahāvidyā* syllogisms. Some writers on this subject—both supporting and refuting the syllogisms—must have existed between the life-time of Kulārka Paṇḍita (11th cent. A.D.) and that of Vādīndra (first quarter of the thirteenth century) who after giving a detailed exposition of them has refuted them at length in his *Mahāvidyā-viḍambana*. Vādīndra reproduces some arguments of an older author in refutation of *mahāvidyā*[1] and also some arguments of another in support of *mahāvidyā*.[2] The unknown author of the *Mahāvidyā-daśaślokī-vivaraṇa*, who must have flourished after Śivāditya (975-1025 A.D.), states at the end of the

work that though the ten verses of *Mahāvidyā* were annotated by the ancients (*cirantana*) he has explained them for the edification of the dull-witted. Bhuvanasundarasūri (1399-1460 A.D), a Śvetāmbara Jaina of the Tapāgaccha has written *Mahāvidyā-viḍambana-vyākhyāna-dīpikā* (a commentary on Vādīndra's *Mahāvidyā-viḍambana*), *Laghumahāvidyā-viḍambana* and *Mahāvidyā-vivaraṇa-ṭippana*. Ānandapūrṇa (sixteenth century) has commented on the *Mahāvidyāviḍambana* in his *Mahāvidyāviḍambana-vyākhyāna*.[3] There is no indication of a reference to the *mahāvidyā* earlier than Śrīharṣa (12th cent.). References to the *mahāvidyā* are found in the writings of Citsukha (1220 A D.), Amalānanda (1247 A D.), Ānandajñāna (1260 A.D), Venkaṭanātha (1369 A.D.) and others. We can say that the *mahāvidyā* syllogisms were systematically formulated probably some time in the eleventh century and they continued to be referred to or refuted by writers till the fifteenth century, though surprisingly enough no text-book of logic takes serious note of them.

Telang discusses the name '*Mahāvidyā*' in his Introduction, pp. i-ii to *Mahāvidyā-viḍambana* published in the Gaekwad's Oriental Series. The word '*Mahāvidyā*' means 'a great science'; it means the ten goddesses Kālī, etc. as mentioned in the *Vācaspatya*. *Vidyā* means an incantation of a female deity so *Mahāvidyā* can also mean a great or important incantation. But these cannot be the meanings when it is a name of a kind of syllogism. Vādīndra explains the term in his *Mahāvidyāviḍambana* as follows : *Kevalānvayini vyāpake pravartamāno hetuḥ pakṣe vyāpaka-pratītyaparyavasānabalād anvaya-vyatireki-sādhya-viśesaṁ vādyabhimataṁ sādhayan mahāvidyety ucyate. tasya ca mahāvidyātvam asiddhatvādi-sakaladoṣavirahaḥ.* "—p. 3 [A positive probans which being present in the subject proves the positive-negative probandum as desired by the debater by virtue of the fact that the pervader (*vyāpaka*) i.e. the *sādhya* (of the *mahāvidyā*), could not be otherwise established, is termed '*mahāvidyā*'. It is called *mahāvidyā* because it is free from

all fallacies such as *asiddha hetu* (unreal or unproven probans). and the like]. * How '*mahāvidyā*' from meaning a female deity or a great incantation came to be used for a purely affirmative probans (*kevalānyayi hetu*) is a mystery. Telang tries to explain this by assuming that Kulārka Paṇḍita, himself a great tāntrika, must have used the word '*mahāvidyā*' symbolically to denote the *kevalānvayi hetu*, as the number of *mahāvidyā* syllogisms is *ṣoḍaśa* (sixteen) which corresponds to *ṣoḍaśī* which is also one of the names of the female deity specially worshipped by him. The number 'ten' of the stanzas in the *Daśaślokīmahāvidyāsūtra* also corresponds to the number of the goddesses—Kālī, etc.

The controversy as regards the eternality or non-eternality of *śabda* (word) has been prevalent in India from very ancient times, especially between the Mīmāṁsakas on the one hand and the Naiyāyikas and the Vaiśeṣikas on the other, the former regarding *śabda* as eternal and the latter as non-eternal. Bhuvanasundara states in two verses at the commencement of his commentaries on *Mahāvidyā-viḍambana* and *Mahāvidyā-vivaraṇa* that the Bhāṭṭa Mīmāṁsakas regard *śabda* as eternal, whereas the Yaugas (Naiyāyikas and Vaiśeṣikas) regard it as non-eternal, so a controversy arose between them. Therefore in order to convince the Bhāṭṭa debaters about the non-eternality of *śabda*, the great Yaugācārya (i.e. Kulārka Paṇḍita) invented the *mahāvidyā* syllogisms.[4] It is true that most of the *mahāvidyā* syllogisms given by Kulārka establish the non-eternality of *śabda*.

The special feature of the *mahāvidyā* syllogisms is that they attempt to prove the thesis by the *kevalānvayi* method. In a *kevalānvayi* (purely affirmative) inference, the major term or the probandum (*sādhya*) is so universal as not to be absent anywhere, with the result that it cannot have a middle term or probans (*hetu*) whose concomitance with the probandum could be determined by its non-existence in all cases where the probandum is absent, besides being determined by its being invariably connected with the probandum where

* This will become clear later.

it is present; that is to say, there are no *vipakṣas* or negative examples. 'Jar is nameable because it is knowable' (*ghaṭo'-bhideyaḥ prameyatvāt*) is an instance in point. The *mahāvidyā* syllogisms are forms of *kevalānvayi* inference of this type. It is claimed that the *mahāvidyā* syllogisms have this advantage that it is not easy to criticise them by pointing out defects or lapses of the concomitance of the probans and the probandum as no negative instances are available and all things can be cited as positive illustrations In order that a *kevalānvayi* form of syllogism should be able to affirm the non-eternity of *śabda*, Kulārka formulated propositions in sixteen different ways so that the non-eternality of *śabda* or the like probandum would necessarily follow as the only consequence, the other possible alternatives being ruled out by the conditions of the proposition.[5] We shall have occasion to see illustrations of this later. It is this indirect way of inference that has induced critics to style the *mahāvidyā* 'round-about syllogism' (*vakrānumāna*).[6]

Mahāvidyā has been defined, as said above, as that *hetu* (probans) (i.e. mode of syllogism) by which a specific probandum, which it is desired to prove by the joint method of agreement and difference, is proved by the necessary implication of the existence of a particular probandum in a particular subject, affirmed by the existence of the *hetu* in the subject on *kevalānvayi* lines. That is to say, here the *hetu*, adduced in respect of a probandum unfailingly abiding in a subject (*pakṣa*), proves, by virtue of the fact that such an unfailing existence of that probandum in that subject in that way is possible only under one supposition, viz. the affirmation of another probandum in another subject (e.g. the affirmation of non-eternality in respect of *śabda*), which is generally sought to be proved by the direct method of agreement and difference.[7] (*Kevalānvayini vyāpake pravartamāno hetuḥ pakṣe vyāpaka-pratītyaparyavasānabalād anvaya-vyatireki-sādhya-viśeṣaṁ vādy-abhimataṁ sādhyayan mahāvidyety ucyate.*—MVVi, p. 3.), This will be clear when we consider the propositions as formulated

by Kulārka. Such a *hetu* is called *mahāvidyā* as it is free from the faults of *asiddhatva* etc. which are described as fallacies of reason (*hetvābhāsa*). The probans (e.g. *prameyatva*) is definitely known to be present in the *pakṣa*, so there cannot be the fallacy of *pakṣadharmatvāsiddhi* (—that the *hetu* is not recognised as an attribute of the *pakṣa*). In the case of the *kevalānvayi* form of inference there being nothing like *sādhyābhāva* (negation of the probandum), there can be no lapses of concomitance (i.e. *vyabhicāra*) of the probans and the probandum and hence also there cannot be the faults of *vyāpyatvāsiddhi* (unproven concomitance), and the faults of *viruddha* (contrary), *anaikāntika* (inconclusive), *satpratipakṣa* (counterbalanced) and *bādhita* (contradicted) reason; the *sādhyābhāva* (negation of *sādhya*) itself not being there, there can be no suspicion of the *hetu* being present in a *vipakṣa* or of there being another reason or proof which establishes it.[8]

This *mahāvidyā* can be of many types. The principal inference or syllogism (*mukhyānumāna*) in all cases is the one which proceeds by the direct method of agreement and difference (*anvaya-vyatireka*). As the *mahāvidyā* syllogism is primarily intended to refute the eternality of *śabda* the *mukhyānumāna* is mostly the one proving *śabda* to be non-eternal, viz. *śabdaḥ anityaḥ kṛtakatvāt, ghaṭavat* (*śabda* is non-eternal, because it is a product, like a jar.) The *mahāvidyā* has as its *pakṣa* (subject) the *pakṣa* of the principal inference (*mukhyānumāna*), or the *sapakṣa* (homologue), or the *vipakṣa* (heterologue), or the probandum, or the negation of the probandum or the like of the principal inference.[9]

Now we may consider the sixteen varieties of *mahāvidyā* syllogisms as given by Kulārka in his *Daśaślokīmahāvidyāsūtra.* They can serve as models for the refutation of different theories and doctrines.

(1) *Ātmā śabdetarānityanityavṛttitvā'nadhikaraṇā'nitya-vṛtti-dharmavān meyatvāt, ghaṭavat.*"– "By reason of knowability

(*meyatva*), the soul possesses an attribute which is not jointly present in eternal and non-eternal things other than *śabda*, and which is found in non-eternal things, like jar." If *ātman* be said here only to possess qualities or attributes of non-eternal things (*ātmā anityavṛttidharmavān iti*), then it would be a case of *siddha-sādhana* (proving what is already established) in respect of *sattā* (existence) which is recognised by both the parties in a debate as an attribute of all eternal and non-eternal things and hence of the soul. To preclude '*sattā*' the expression used is 'possessing an attribute resident in non-eternal things other than *śabda* (*śabdetarānityavṛttidharma-vān*) as *sattā* is found in *śabda* also. Even then it would be a case of *siddha-sādhana* in respect of *dravyatva* (substance universal) which is admitted to be present in the soul by both the parties, so to preclude it 'not having a quality which is present in eternal things' (*nityavṛttitvā'nadhikaraṇa*) is inserted in the proposition, as *dravyatva* is found in eternal things also. Then the proposition would signify that the soul has an attribute which is not present in eternal things and in non-eternal things other than *śabda*. Now, if such an attribute were to be absent in both eternal and non-eternal things other than *śabda*, it could be '*ātmatva*' (soul-universal) alone, which would again be a case of a *siddha-sādhana* as there is no dispute about *ātmatva*. Hence a further qualification is added —' having an attribute which resides in non-eternal things ' (*anityavṛttidharmavān*). So also those which reside in eternal things alone, e g. eternality (*nityatva*), uniformity of nature (*eka-svabhāvatā*), etc. are precluded by the expression *anityavṛtti-dharmavān* (possessing an attribute found in non-eternal things). Those which reside in non-eternal (*anitya*) things alone are precluded by making the eternal *ātman* the subject (*pakṣa*) of the syllogism. The only attribute that remains as satisfying these conditions is the mutual difference or negation (*anyonyābhāva*) of *śabda* and *ātman*, or *śabdātmānyataratva* (being one of *śabda* and *ātman*) and the like, that is to say, any attribute present in *ātman* and *śabda* alone; as this alone can be

proved in respect of the *ātman*. But how does this prove *śabda* to be non-eternal (*anitya*)? The attribute, e.g. *śabdā tmānyonyābhāva* is proved of *ātman* which is admitted by both the parties to be eternal. Now, this can be said to be present in a non-eternal thing, only if *śabda* is recognised as non-eternal since it cannot reside in other non-eternal things like jar etc. So *śabda* has necessarily to be regarded as non-eternal. It may be noted here that a thing is said to be absent in a pair of things if it is absent in both or absent in either. Hence *śabdātmānyonyābhāva* is 'absent in non-eternal things other than *śabda* and in eternal things', for though present in *ātman* which is eternal, it is absent in all non-eternal things other than *śabda*.[10]

Thus the *mahāvidyā* proves *śabda* to be non-eternal by an indirect and round-about method. The illustration jar also has an attribute, viz. 'jarness' which is found to satisfy all the conditions as it does not jointly reside in eternal and non-eternal things other than *śabda* (being found in jar alone) and it resides in the non-eternal jar. The *vyāpti* in the present case is, 'What is knowable has an attribute which is not jointly present in eternal and non-eternal things other than *śabda* and is present in a non-eternal thing, e.g. jar' (*yat yat prameyaṁ tat tac chabdetarānitya-nityavṛttitvā'nadhikaraṇānitya-vṛttidharmavat yathā ghaṭādi*). It may be urged that *ākāśa* does not have an attribute satisfying these conditions even though it is knowable, and so there is lapse of concomitance (*vyabhicāra*), or the reason is an inconclusive one. But this is not proper, as '*ākāśa*' etc. are as good as the *pakṣa* (*pakṣatulya*); *ākāśa* can be substituted for '*ātman*': *ākāśaṁ śabdetarānitya-nitya-vṛttitvānadhikaraṇā'nityavṛttidharmvat meyatvād ghaṭādivat*) Therefore, there is no lapse of concomitance (*vyabhicāra*) in respect of the *pakṣa* or what is its equal.[11]

After having considered the illustration it will not be difficult to understand the definition or pattern of this variety of *mahāvidyā* as given by Kulārka Paṇḍita. "An

attribute which is *not* one ' which being present in that which is not the *pakṣa* (of the principal syllogism), is present in things having the probandum (i.e. in the *sapakṣa* of the principal syllogism—e.g. *śabdetarānityavart*') and in the *vipakṣa* (of the prinicipal syllogism e.g *nityavarti*)' and which is related to that which has the probandum (e.g. *anityavṛtti*), is proved or affirmed in respect of a thing devoid of the probandum, that is to say, of a *vipakṣa* (of the principal syllogism)."

(*apakṣasādhyavadvṛtti vipakṣānvayi yan na tat*
sādhyavadvṛttitāyuktaṁ sādhyate sādhyavarjite.—DMV, 1).

For example, the mutual negation (*anyonyābhāva*) of *śabda* and *ātman* which is not present in the pair of non-eternal things other than *śabda* (*apakṣasādhyavat*), and eternal things (*vipakṣa*), and which is present in a non-eternal thing only (*sādhyavadvṛttitāyukta*) is proved of *ātman* (which is not non-eternal, i.e. which is the *vipakṣa* of the original syllogism). Here the *vipakṣa* of the principal syllogism is made the *pakṣa* of the *mahāvidyā*. *

(2) "An attribute which is *not* ' one which is found in things other than the *pakṣa* that have the *sādhya*, (i.e. in the *sapakṣa*) and in the *vipakṣa* which is made the *pakṣa* of the present syllogism ' (—i e. which is not found in the pair—) and which is found in that which is possessed of the probandum, is affirmed of the *vipakṣa*."

(*apakṣasādhyavadvṛtti vipakṣe pakṣite na yat,*
sādhyavadvṛttitāyuktaṁ sādhyate tadvipakṣagam —DMV, 2).

For example, " *ākāśaḥ ākāśaśabdetarā'nityavṛttitvā-nadhikaraṇānityavṛttidharmavān meyatvāt, ghāṭavat*" — ' By reason of knowability, *ākāśa* possesses an attribute which is not jointly present in *ākāśa* and non-eternal things other than *śabda* and which is an attribute found in a non-eternal thing;

* It may be noted that the terms *pakṣa*, *sapakṣa*, *vipakṣa* in the definitions stand for the *pakṣa* etc. of the principal syllogism, not for those of the *mahāvidyā*.

like jar.' The difference of this syllogism from the previous one is that in the latter all the *vipakṣas* were precluded, while here only *ākāśa*, the *pakṣa* of the *mahāvidyā*, is precluded. If the proposition were only this much that *ākāśa* is possessed of an attribute present in non-eternal things, then it would have been a case of *siddha-sādhana* (proving what is already established) in respect of *sattā* (which is accepted by both parties as found in *ākāśa*), and hence the expression 'other than *śabda*' is inserted. Even then the relation of jar and *ākāśa* (which is regarded as an attribute) does subsist in the jar which is a non-eternal thing other than *śabda*, and this again would be a case of *siddha-sādhana*. To preclude this the expression 'does not possess an attribute which is found in non-eternal things ' is introduced. Still there would be the same difficulty with regard to the relation of *ākāśa* and atom (*paramāṇu*) which is not found in non-eternal things other than *śabda* as it is found in the eternal atom alone; hence the insertion of the expression ' found in a non-eternal thing '. Then the proposition would signify that *ākāśa* is possessed of an attribute which is not found in non-eternal things other than *śabda* and is found in a non-eternal thing. But such an attribute is not seen elsewhere; no attribute is possible which is present in a non-eternal thing and yet is non-existent in a non-eternal thing other than *śabda*; what is present in a non-eternal thing does exist in non-eternal things other than *śabda*, as for example, jarness, etc.; and in the absence of a *sapakṣa* the positive concomitance itself would be set at nought, and hence '*ākāśa* is inserted so that no flaw remains. That which is not found in the pair of *ākāśa* and non-eternal thing other than *śabda* is also one which is found in a non-eternal thing. Such an attribute is *śabdākāśānyonyābhāva* which can be said to be present in a non-eternal thing only if *śabda* be regarded as non eternal as *ākāśa* is regarded by both the parties as eternal, and as it is not found in any entity other than these. Thus *śabda* is indirectly proved to be non-eternal. The example jar has

an attribute—viz. mutual negation of jar and 'jarness' or *ātman* — which also is non-existent in the pair of *ākāśa* and non-eternal thing other than *śabda* (as it is found in the non-eternal jar, but not in *ākāśa*) and is present in the non-eternal jar.[12] Here also a *vipakṣa* of the principal syllogism is made the *pakṣa* of the *mahāvidyā*. *

(3) " An attribute, which is not jointly present in that which possesses the probandum except the *pakṣa* (i.e. in *sapakṣa*), and the *vipakṣa*, and which is not present in a number of *vipakṣas* (lit. which is different from that which is present in many *vipakṣas*) and is an attribute of things different from the *pakṣa*, is affirmed of the *pakṣa* (of the principal syllogism) which is made the *pakṣa* (in the *mahāvidyā* also)."

apakṣa[13]*–sādhyavadvṛtti-vipakṣānvayavarjitaḥ,*
nānāvipakṣavṛttyanya-bhinnadharmo' sti pakṣite.—DMS, 3).

For example, "*śabdaḥ aśabdānityanityavṛttyanya-nānānityā-vṛttyaśabdadharmavān meyatvād, ghaṭavat*" — "By reason of knowability, *śabda* is possessed of an attribute which is not present in the pair of non-eternal things different from *śabda* and eternal things, and is not found in a number of eternal things, and is an attribute of a thing different from *śabda*, like jar." This attribute can be non-eternality in the case of '*śabda*'. The unknown author of the *Mahāvidyā-vivaraṇa* has made it clear that what is meant by its 'being an attribute of what is different from *śabda* (*aśabda-dharmatva*)' is that it is not an attribute of *śabda* alone, but of all non-eternal things, otherwise it would be contradictory to say that an *aśabdadharma* in affirmed of *śabda* (*tasya ca idam eva aśabda-dharmatvaṁ yat sakalānitya-sādhāraṇyam iti na kaścid doṣaḥ.*— MVV, p. 170). Moreover, when it is said that this attribute is not jointly present in *sapakṣas* and *vipakṣas* it can be absent in both or in either. But '*aśabdadharmavān*' excludes absence in both so it must be present in one of the two. 'Absence in many '*vipakṣas*' excludes presence in eternal things; thus by

* Henceforth all such details will not be mentioned.

eliminination it should be regarded as present in non-eternal things. The probandum thus is *anityatva* (non-eternality). It can also be *ghaṭaśabdānyataratva* (being one of jar and *śabda*) or the like. This is present in jar and *śabda* alone, so it does not exist in many eternal things whether *śabda* be regarded as eternal or non-eternal. ' What is different from *śabda* ' signifies jar, etc, but the attribute ' *ghaṭaśabdānya-taratva* ' and the like could be absent in eternal and non-eternal things only if *śabda* be regarded as non-eternal, otherwise being present in the eternal *śabda* and the non-eternal jar it would be ' present in eternal and non-eternal things.' The examples are jar, *ākāśa*, etc. and their relevant attributes are ' jarness ', ' *ākāśatva* ' etc. ' Not present in many *vipakṣas* is meant to allow ' *ākāśa* ', etc. as examples; otherwise *ākāśatva* present in *ākāśa* which is *nitya* (eternal) would be *nityavṛtti*, not *nityāvṛtti*; by virtue of the term '*nānā*' (many), though *ākāśatva*, etc. are not '*nityāvṛtti*', they are nevertheless '*nānānityāvṛtti*', absent in many eternal things.

(4) " That which is absent in the *pakṣa* and the *vipakṣa* and is devoid of ' both presence and absence ' in the *pakṣa* (i.e. which is invariably present or invariably absent in the *pakṣa*) is affirmed of the *pakṣa* (or that which is made the *pakṣa* (*pakṣāpakṣagatād anyat sādhyavad-dvaidhavarjitam*.—DMS. 4 ab—*sādhyavān pakṣaḥ, tatra yad dvaidhaṁ tatra vṛttiḥ avṛttis ca tadvarjitaṁ, vartmānāvarta-mānatvarahitam ity arthaḥ*.—MVV, p. 171). " *Gandhavanto gandhavad-agandhāvṛtti-gandhavadvṛttyavṛttyanyavantaḥ meya-tvād ākāśavat*. "—By reason of knowability, things having smell have an attribute (viz. *pṛthvītva* 'earthness') which is absent in the pair of *pakṣa* and *vipakṣa* (—though present in the *pakṣa*, things having smell, it is absent in the *vipakṣa*, and so is absent in the pair) and is not both present and absent (i.e. is invariably present) in all things having smell, like ether.

All things devoid of smell can serve as illustrations, e.g. water. etc. possessed of 'waterness', etc. In the example,

ākāśa, the attribute *śabdāśrayatva* (being the substratum of *śabda*) or *ākāśatva* satisfies the conditions of the proposition because it is not present in the *pakṣa*, and so in the pair of *pakṣa* and *vipakṣa* and is never present in things having smell. The principal syllogism (*mukhyānumāna*) in the present case is " *pṛthvī dravyatvāvāntarajātimatī mūrtadravyatvāt jalavat* " [Earth has a sub-genus of substanceness ' (*dravyatva*), because it is a corporeal substance, like water]. Like *pṛthvītva* of things having smell, *tejastva*, etc. can be similarly proved of things having light, etc. i.e. of *tejas* etc.[14] The *pakṣa* of the principal syllogism or all its particular varieties is here made the *pakṣa* of the *mahāvidyā*. Bhuvanasundara observes that *gandhavattva*, number present in things having smell, *atyantābhāva* having as its *pratiyogi* (counter-entity) every-thing except things having smell—all satisfy the conditions of the proposition and no one has a doubt as to these. So there is the fault of *siddha-sādhyatā* (that which is already established being proved) in such *mahāvidyās*. He leaves it at that for the *kuśalataras* (experts) to think for themselves.[15]

(5) (Again a variety proving the non-eternality of *śabda*—) " An attribute which is absent in the pair of *pakṣa* and *apakṣa* (i.e. *sapakṣa* and *vipakṣa*) and is present in the *sapakṣa* is affirmed of the *pakṣa*." This means that the attribute should not be present in all the three—*pakṣa, sapakṣa* and *vipakṣa*—but must be certainly present in two of them (*Pakṣāpakṣagatād anyat sādhyavadvṛtti pakṣagam.*—DMS, 4cd) For instance, '*Śabdaḥ śabdāśabdāvṛtty-anityavṛttidharmavān meyatvād ghaṭavat* '—By reason of knowability, *śabda* has an attribute which is absent in the pair of *śabda* and non-*śabda* and is present in non-eternal things, like jar. Now, attributes of things other than *śabda* cannot be proved of *śabda*, so the probandum comprises the attributes of *śabda*, viz. *śrāvaṇatva* audibility), *śabdatva*, etc They can be said to be present in non-eternal things only if *śabda* be accepted as non-eternal. Thus *śabda* is proved to be non-eternal in an indirect manner. The examples, jar etc. all have *śabdāṇyatva* (difference from

śabda) which is present in *aśabda* (eternal and non-eternal things other than *śabda*) and is absent in *śabda* and so can be said to be absent in the pair of *śabda* and non-*śabda* and to be present in non-eternal things.

(6) After having given an exposition of some varieties of *mahāvidyā* establishing the non-eternality of *śabda* by the positive method, Kulārka states a variety proceeding by the negative method i.e. by making the *sādhyābhāva* the *pakṣa*

"The character of being the counter-positive (*pratiyogi*) of the negation other than mutual negation having the opposite of the probandum as the counter-positive is affirmed of the opposite of the probandum (of the principal syllogism)." The *sādhyābhāva* of the principal syllogism is made the *pakṣa* of the *mahāvidyā* (*Tattādātmyaniṣedhānya-tatsthābhāva-virodhitā*.—DMS, 5ab). For instance, '*Nityatvaṁ svapratiyogikānyonyābhāvātiriktaśabdagatābhāva-pratiyogi meya-tvād ghaṭavat*'—By reason of knowability, eternality is the counter-positive of the *saṁsargābhāva* (relational negation) present in *śabda* (eternality is not present in *śabda*—), which is other than the mutual negation or denial of identity of itself and *śabda* (—eternality is not *śabda*—), like jar.[16]

Thus eternality is proved to be the counter-positive (*pratiyogi*) of the relational absence (*saṁsargābhāva*) of eternality in *śabda*, which amounts to proving non-eternality, the opposite of eternality, of *śabda*. This attribute is found in the examples jar, ether, *śabda* etc. also. And *śabdatva*; *śrāvaṇatva* (audibility), etc. are counter-positives of their mutual negation in respect of *śabda*, and so are all *sapakṣas*.

It may be noted here that we have the word '*anya*' in the *kārikā* of Kulārka in a general way, so the word '*atirikta* is substituted for it in the illustrative syllogism; other synonymous words can similarly be substituted for it.

(7) A syllogism establishing difference in respect of things recognised as one : "Establishing the fact of being other than what is possessed of an attribute which is recognised as

subsisting in that alone (*svīkṛtānanyavṛttitvasampannā'nyatva-sādhanam.*—DMS, 5cd). For instance, '*śabdādhikaraṇaṁ śabdādhikaraṇād anyat, meyatvāt, ghaṭavat*—' By reason of knowability; the substrate of *śabda* is different from the substrate of *śabda*, like jar.' *Śabda* subsists in *ākāśa* alone and so is *ananyavṛtti* (*anyatra vartate ity anyavṛttiḥ; nānyavṛttiḥ ananyavṛttiḥ. ekavṛttir ity arthaḥ.*– MVV, p. 177). The syllogism proves that the substrate of *śabda* is different from the substrate of *śabda*; that is to say, *ākāśa* is different from *ākāśa*, which necessarily presupposes a plurality of *ākāśas*. The example jar also is different from the substrate of *śabda*.

The author of the *Vivaraṇa* says that Kulārka has hereby merely shown the method of proving difference; it could not be his intention to prove a plurality of *ākāśas* as that would involve *apasiddhānta* (going against one's own tenets), as the Vaiśeṣikas regard *ākāśa* as one (*bhedasādhanaprakāradarśanamātram etat, na tu bhedaśādhanam. apasiddhāntaprasaṅgāt.*—MVV, p. 177). Bhuvanasundara says that the purpose of the syllogism could be served even by stating that '*ākāśa* is different from *ākāśa*', but the *mahāvidyā* syllogisms adopt a round-about way of stating simple things. All things accepted as one can thus be proved to be many.[17] The principal syllogism (*mukhyānumāna*) in the present case is '*Dik-kālā"-kāśāḥ aneke, dravyatvāt, ghaṭavat*'—Space, time, *ākāśa* are many, because they are substances, like jar '. The *pakṣa* of the *mukhyānumāna* is also the *pakṣa* of the *mahāvidyā*.

(8) Kulārka shows by the under-mentioned variety of *mahāvidyā* how to prove in particular that a thing has an author or creator (*sakartṛkatva*), and how in general to prove whatever is to be proved, e.g. *akartṛkatva* (not having a creator), *apauruṣeyatva* (not being brought about by a person), *pauruṣeyatva* (being brought about by a person). etc. The principal syllogism in this case is '*Aṅkurādikaṁ sakartṛkaṁ kāryatvāt, ghaṭavat*'—'Sprout, etc. have a creator, because they are effects, like jar. ' The *sapakṣa* of the principal syllogism

is made the *pakṣa* of the *mahāvidyā*. "One picked up from the group of *pakṣa, sapakṣa* and *vipakṣa* is affirmed to be different from that which is possessed of the probandum and which is the limit (*avadhi*) of the difference. *

(*Pakṣāpakṣavipakṣānyavargād ekaikam uddhṛtam; bhinnaṁ sādhyavatas tadvaduddhṛtāvadhibhedinaḥ.*—DMS, 6).

For instance,'*Ayaṁ ghaṭaḥ etadghaṭāṅkurānyānya-sakartṛkānyaḥ, meyatvāt ākāśavat.*' ' By reason of knowability, this jar is different from one of the things having a creator other than the things other than jar and sprout, like *ākāśa*'. That is to say, 'Jar is different from jar or sprout'. Now, jar could not be different from itself so it must be different from sprout having a creator. And if jar be proved to be different from sprout having a creator, it follows that sprout must have a creator. Earth, mountain, etc. can similarly be proved to have a creator, and this creator is God. Thus the Nyāya-Vaiśeṣika establishes the existence of God. (The example *ākāśa* is different from jar).

(9) Another form of the above syllogism : 'The *sapakṣa* is affirmed to have an attribute which is not present in the *sapakṣa* and the *pakṣa* ' (*Tasyaiva tadavṛttena yogo vā'tra prasādhyate.*—DMS, 7ab). For instance, '*ayaṁ ghaṭaḥ etad-ghaṭāṅkurānyānyasakartṛkāvṛttimān meyatvāt, ākāśavat*—By reason of knowability, this jar has an attribute which is not present in *sakartṛka* things (things having a creator) other than the things other than jar and sprout, like *ākāśa*'. This signifies that jar has an attribute which is not present in the *sakartṛka* jar and sprout. Now, jar cannot have an attribute which is not present in jar, so it must have an attribute which is not present in *sakartṛka* sprout. Thus, sprout is proved to have a creator or to be *sakartṛka*.

(10) Still another form of (8)—'The absence of an attribute present in *sapakṣa* and *pakṣa* is affirmed of the picked-up

* In 'X is different from Y', Y is the *avadhi* of the difference. ' *ghaṭaḥ aṅkurād bhinnaḥ*'—here '*aṅkura*' in the ablative case signifies the *avadhi*.

thing(*sapakṣa*)'(*Tadvṛttyavṛttir atha vā proddhṛte'tra prasādhyate.* —DMS, 7cd). For instance, '*ayaṁ ghaṭaḥ etadghaṭāṅkurānyānya-sakartṛka-dharmavirahī, meyatvāt, ākāśavat*'— 'By reason of knowability, this jar is devoid of an attribute which is present in *sakartṛka* things other than the things other than jar and sprout, like *ākāśa*.' That is to say, jar is devoid of an attribute which is present in *sakartṛka* jar and sprout. Now, jar cannot be devoid of an attribute present in jar, so it must be devoid of an attribute present in the *sakartṛka* sprout — which signifies that sprout is *sakartṛka*.

These three varieties (8–10) of *mahāvidyā* can establish any probandum.

Kulārka again gives two varieties establishing the non-eternality of *śabda*.

(11) "Difference from what is different from 'what is different from this i.e. *pakṣa* and is other than the non-probandum' is affirmed of the *pakṣa*". That is to say, difference from non-probandum and *pakṣa* is affirmed of the *pakṣa* (*asādhyānya-viyuktānyavyāvṛttir vā prasādhyate*—DMS, 8ab). For instance, '*śabdaḥ sādhyābhāvānyaitadviyuktānyavyāvṛttimān, meyatvāt, ghaṭavat*'—" By reason of knowability, *śabda* is different from what is other than ' what is different from the non-probandum (eternal) and what is other than it (all things other than *śabda*)', like jar." That is to say, '*śabda* is different from what is other than non-eternal and all things other than *śabda*, i.e. *śabda* is different from eternal and *śabda*. Now it could not be different from itself, so it must be different from eternal, that is to say, *śabda* must be non-eternal. The example jar is different from both *śabda* and eternal; the example *ākāśa* is different from *śabda* but not from eternal still it can be said to be different from the pair. An objection is anticipated by Bhuvanasundara : *Śabda* can be different from *śabda* also because there is plurality of *śabdas* (sounds), so *śabda* need not necessarily be different from eternal as stated above. The answer to this is that *śabdas* in all the three worlds are included in the *pakṣa* which is not particularised as ' this *śabda*', therefore the objection cannot stand

(12) "The pakṣa is affirmed to be different from what is different from all things other than the non-probandum and the pakṣa" (*asādhyatadviyuktānyavyāvṛttir vā prasādhyate.* —DMS, 8cd). For instance, '*śabdaḥ sādhyābhāvatadviyuktānyavyāvṛttimān meyatvāt ghaṭavat*' — 'By reason of knowability, *śabda* is different from what is different from all things other than the non-probandum (eternal) and itself (*śabda*), (that is to say, *śabda* is different from eternal and *śabda*), like jar.' *Śabda* cannot be different from itself, so it must be different from eternal, that is to say, must be non-eternal.

Kulārka again gives varieties of *mahāvidyās* that can be employed to prove whatever one desires to prove.

(13) 'Leaving aside attributes which are not disputed, an attribute about which there is difference of opinion is to be affirmed in respect of the *pakṣa*'. (The *pakṣa* of the principal syllogism is also the *pakṣa* of the *mahāvidyā*). (*Pakṣeṣu ye santi vivādahīnāḥ vihāya tān anyataraḥ prasādhyaḥ.* — DMS 9ab). For instance, '*śabdaḥ sampratipannaitanniṣṭhānyadharmavān, meyatvād, ghaṭavat*'—'By reason of knowability, *śabda* is possessed of attributes other than those which are incontestably accepted as residing in it, like jar.' This attribute is '*anityatva*' (non-eternality) which is not recognised as an attribute of *śabda* by the opponent — the Mīmāṁsaka. The illustrations jar, *ākāśa* etc. have respectively the attributes jarness, eternity, etc. which are other than those incontestably recognised as existing in *śabda*.

(14) "Or the *pakṣa* is proved to have an attribute other than its attributes which are different from the attribute to be proved"; that is to say, the *pakṣa* is established as having the attribute to be proved. (*Pakṣe'tha vā sādhya-vinākṛtena* — DMS, 9c). For instance, '*śabdaḥ sādhyavyatiriktaitaddharmātiriktadharmavān meyatvād ghaṭākāśādivat.*' — By reason of knowability, *śabda* has an attribute (viz. non-eternality) which is other than its attributes (audibility, existence, etc.) which

are different from the attribute to be proved (viz. non-eternality), like jar. Thus, *śabda* is proved to be non-eternal. The examples jar, *ākāśa*, etc. have respectively jarness, oneness of ether, etc. which are other than the attributes which are different from the attribute to be proved in the case of *śabda*.

(15) "Or the *pakṣa* being separated (i e. being placed in the expression for the probandum in the thesis) is affirmed to have an attribute that is not present in the *pakṣa* as qualified by the negation of the probandum" (*vicchidya vā'bhāvavad-anvitena*—DMS, 9d). * For instance, '*Śabdaḥ śabdanityāvṛtti-dharmavān meyatvāt ghaṭākāśādivat*' — "By reason of knowability, *śabda* has an attribute not present in word-eternal, like jar. *ākāśa* etc.' If *śabdu* be taken to be eternal then the attributes *śabdatva*, etc. would not be *Śabdanityāvṛtti*, absent in *śabda* (word)-eternal, for they would be present in *śabda* which is eternal. So *śabda* must necessarily be supposed to be non-eternal.[18] The examples jar, *ākāśa*, etc. have respectively attributes jarness, *ākāśatva*, etc. which are not present in *śabda-nitya* (—eternal thing in the form of *śabda*).

(16) "An attribute which is not present in the pair of the *sapakṣa* (that which has the attribute that is to be proved and is other than the *pakṣa*) and the *vipakṣa* and is not present in a *vipakṣa* other than the *vipakṣa* which is the substrate of the *pakṣa* (*sādhyate iti sādhyaḥ pakṣaḥ śabdaḥ*), (that is to say, is present in the *vipakṣa* which is the substrate of the *pakṣa*) is affirmed of the *pakṣa* (of the principal syllogism which is also the *paksa* of the *mahāvidyā*)."

(*apakṣa-sādhyavadvṛtti-vipakṣānvayi yan na tat.*
sādhyāśrayavipakṣānyavipakṣe vyatirekabhāk.—DMS, 10)

For instance, '*Śabdaḥ śabdetarānityanityāvṛttyākāśānyanitya-mātravṛttitvā'nadhikaraṇā''kāśadharmavān meyatvāt ghaṭākāśādivat*'—'By reason of knowability, *śabda* has an attribute which

* *kimbhūtaḥ sādhyate iti ākāṅkṣāyāṁ pūrvavad vyāvṛttadharmavān iti ślokaikatvād anuvartate.*—MVV., p. 186.

is not present in the pair of eternal things and non-eternal things other than *śabda*, and has an attribute of *ākāśa* which is (at the same time) not existent in all eternal things other than *ākāśa*, like jar, *ākāśa*, etc.' This attribute is *śabdākāśā-nyataratva* (being one or the other of *śabda* and *ākāśa*) and the like. It is not found in non-eternal things other than *śabda* and is found in the eternal *ākāśa*, so being absent in one member of the pair it can be said to be absent in the pair of eternal things and non-eternal things other than *śabda*. It is also an attribute of *ākāśa*. It can be said to be 'not an attribute of eternal things other than *ākāśa*' only if *śabda* is non-eternal because if *śabda* is eternal, it being existent in it, could not be said to be absent in all eternal things other than *ākāśa*; so this proves *śabda* to be non-eternal. The example jar has an attribute *ghaṭaśabdākāśānyataratva* which satisfies all these conditions.

Vādīndra gives, in his *Mahāvidyā-Viḍambana*, other varieties too of *mahāvidyā*, but it is not necessary to go into further details as these sixteen varieties are sufficient to give us an idea of the involved method adopted by the *mahāvidyā* syllogism even while proving a simple thing, in order to confuse the opponent. Intellectual giants of the world of debate including Vādīndra did not think much of these involved and crooked *mahāvidyā* syllogisms. Vādīndra gives an exposition of *mahāvidyā* syllogisms so that the opponent employing these should not gain an easy victory simply because the other party was ignorant of their technique. And if necessary when one is at a loss to find a proper proof or a proper rejoinder to be given to the opponent, especially when one's system of philosophy is at stake in a debate with the adherents of a rival school, one could employ these *mahāvidyās* as one would *jātis*; by chance if the opponent is not sufficiently alert and shrewd and intelligent one may save one's position thereby. Thus the *mahāvidyā* can be used to confuse the opponent or when one cannot find a proper proof or rejoinder to demonstrate one's position or refute the opponent. Vādīndra

then points out the drawbacks and faults of the *mahāvidyā* syllogisms in general so that a debater is fully aware of their common weaknesses and can point them out when the opponent tries to confuse and embarrass him by means of such syllogisms, and thus expose the opponent.[19]

The main points of Vādīndra's criticism may briefly be stated as follows — The *mahāvidyā* syllogisms have a *kevalā-nvayihetu* (purely positive reason). Vādīndra says that it is not possible that there should be a *hetu* (probans) which is universally present and has no negative instance (*kevalānvayi-hetor eva nirvaktum aśakyatvāt*—MVVi, *Paricceda* 2, p. 76). It is difficult to prove that a particular attribute (e. g *prameyatva*, knowability) exists everywhere and that there is no instance or case where it does not occur (MVVi, pp. 76–92). We may ask a simple question : Does knowability exist in itself or not ? If it does, there would be the fault of *ātmāśraya*; a thing cannot subsist in itself. And if it does not subsist in itself, then it cannot be regarded as *kevalānvayi* as it is absent in at least one thing, and a *kevalānvayi* should be necessarily existent in all things (*Ibid*, pp. 92–93). Further, no mark or reason could be known to be invariably concomitant with such a universally present attribute, for invariable concomitance (*vyāpti*) signifies, and is determined by, the absence of the probans where the probandum is absent. But in the case of a *kevalānvayi hetu*, the *sādhya* also must be universally present and one gets no chance of observing the absence of the *hetu* where the *sādhya* is absent. No definition of *vyāpti* will hold good if the *hetu* is *kevalānvayi* (present in all things) (*Ibid*, pp 93–98). Kaṇāda and Praśastapāda themselves have not recognised the *kevalānvayi hetu* as a valid probans and we need not show any concern for the commentators—the authors of *Kandalī*, *Kiraṇāvalī*, etc.; and even if we respect their views, it may be borne in mind that they are only giving an exposition of the views of others (or that they are influenced by the views of other schools) in the exposition of the *kevalānvayi hetu*.[20]

In the third *Pariccheda* of the *Mahāvidyā-Viḍambana*, Vādīndra shows that whatever the *Mahāvidyāvādins* may say there is ample scope for the fallacies of reason mentioned by the author of the *Nyāya-sūtra* and others, — viz., *asiddha* (unproven), *viruddha* (contrary), *anaikāntika* (inconclusive), *satpratipakṣa* (counter-balanced) and *kālātyayāpadiṣṭa* or *bādhita* (contradicted)—even in arguments based on a *kevalānvayi hetu*. He has already shown that is is not possible to establish the invariable concomitance of the *kevalānvayi hetu* — the *mahāvidyā*—with anything, so it is *vyāpyatvāsiddha*; though being always present in the *pakṣa*, it is not *pakṣadharmatvāsiddha*. Moreover, *aśrāvaṇatva* (inaudibilty) is an *upādhi* (extraneous condition) in respect of the *mahāvidyā* proving the non-eternality of *śabda*. The *sādhya* is *anityatva* (non-eternality) and we can say, 'Wherever there is *anityatva* there is *aśrāvaṇatva*, so *aśrāvaṇatva* is more extensive than the probandum (*sādhya*) and it is less extensive than the reason (*meyatva*, knowability). Thus, *aśrāvaṇatva* satisfies the requirements of an *upādhi*, viz. being more extensive than the *sādhya* and less extensive than the *hetu* (*sādhya-vyāpakatve sati sādhanāvyāpakatvam upādhitvam*). The *Mahāvidyāvādin* may raise an objection here that the *sādhya* in the present case is not *anityatva* which follows later on but, for example, '*pakṣīkṛta-śabdataditara-vṛttitvarahitā'nityaniṣṭhādhikaraṇatvam*'; and *aśrāvaṇatva* cannot be more extensive than this as *aśrāvaṇatva* is not found in *śabdatva* which accompanies the attribute to be proved by the *mahāvidyā*. But this is not true. Does the definition of *upādhi* refer to the real probandum (of the principal syllogism) which is meant to be *vyāpaka*, viz. *anityatva*, or to the probandum of the *mahāvidyā* ? If the former, then what is more extensive than *anityatva* being necessarily more extensive than the probans proving it could not be less extensive than the probans. If it be said to be more extensive than the present probandum. '*pakṣīkṛta-śabda-taditara...*' then the *Mahāvidyāvādins* do not recognise an *upādhi* which would be more extensive than this probandum and less extensive

than the probans 'knowability' and so the thing defined viz. *upādhi* and its definition remain unestablished. And if they accept the definition, it stands unaffected as the *upādhi* (*Ibid*, pp. 100–107).

Further, as *śabda* is indirectly proved to be non-eternal for otherwise the probandum of the *mahāvidyā* could not satisfy the conditions of the proposition, viz. 'absence in *śabda* aud things other than it and presence in non-eternal things', so *śabda* can be proved to be eternal when the probans, knowability or the like, helps to affirm of *śabda* an attribute which is not present in *śabda* and things other than *śabda* and is present in eternal things. Thus, the hetu is *viruddha* (contrary) as it proves the contrary of what is intended to be proved. This cannot be the fallacy of counter-balanced (*sat-pratipakṣa*) reason as there are not two reasons leading to two opposite conclusions. All other varieties of *mahāvidyā* can similarly be found to have the fallacy of *viruddha* (contrary) reason (*Ibid*, pp. 107–110). The hetu '*meyatva*' is present in all things, that is to say, even where the *sādhya* is absent, so it is *anaikāntika* (inconclusive) (*Ibid*, pp. 110–114). The *hetu* can also be shown to be a *sat-pratipakṣa* (counter-balanced) one, for we can formulate a *mahāvidyā*: "*ayaṁ śabdaḥ etaditaravṛttitvarahitā' nityaniṣṭhādhikaraṇatvā'-tyantābhāvavān, etadanyatvarahitatvāt*' (—This *śabda* is the non-substrate of an attribute which is absent in itself and what is other than it and is present in non-eternal things, because it is devoid of otherness from it (i.e. because it is 'this *śabda*')". This proves the opposite of what was proved by the syllogism "By reason of knowability, this *śabda* is the substrate of an attribute which is absent in itself and what is other than it and is present in non-eternal things". Many counter-syllogisms can be pitted against the *mahāvidyā* syllogisms so they are ineffectual (*Ibid*, pp. 114–122). *Mahāvidyā* syllogisms can be set forth to refute *mahāvidyā* syllogisms and to point out their fallacies (pp. 122-128). The *mahāvidyā* syllogism can also have the fallacy of *bādhita*

(contradicted) reason, as the said syllogism can be contradicted by "This *śabda* is the non-substrate of 'an attribute which does not subsist in itself and things other than itself and which exists in non-eternal things,' because it is knowable like jar." This knowledge is certainly valid as it is produced by the statement of people like us, that is to say, is of the character of verbal testimony. Its validity can be established by : "This knowledge has an attribute which is absent in the pair of itself and things other than itself and has an attribute which is present in valid knowledge, because it is knowable, like jar." This knowledge could have an attribute present in valid knowledge only if itself were of the nature of valid knowledge (see MVVi, p. 128).

Besides being faulty, all the different varieties of *mahāvidyā* syllogisms dismantle the tenets of the Vaiśeṣika philosophy. ' By reason of knowability, *ākāśa* and the like are the substrates of attributes which are absent in themselves and things other than themselves and which are present in non-eternal things '; ' By reason of knowability, the earth-atom is the substratum of an attribute which is present in itself and things other than itself and which is present in a thing possessing eternal colour'; ' By reason of knowability, the atom of water or the like is the substrate of an attribute which is not present in itself and things other than itself and which is present in a thing possessing colour produced by baking, and so on'; 'By reason of knowability, God has qualities which are not present in Himself and things other than Himself and which are present in an entity possessing non-eternal knowledge, desire, effort, merit, demerit, pleasure, pain, hatred, impression.' These *mahāvidyās* can always be easily formulated and they prove respectively that *ākāśa* and the like (soul, atom, etc.) are non-eternal (whereas they are eternal according to the Vaiśeṣika), that the earth-atom has eternal colour (whereas according to the Vaiśeṣika, it has non-eternal colour); that atoms of water (*ap*) and light (*tejas*) have colour produced by baking

(which contradicts the Vaiśeṣika view), that God has non-eternal knowledge, etc. (whereas according to the Vaiśeṣika, Gods' attributes are eternal and He does not have the attributes of merit, demerit, etc.). Other such *mahāvidyā* syllogisms can be framed to prove that *Śruti* (scriptural knowledge) is invalid or that God is not a creator. Thus the *mahāvidyā* syllogisms are not at all reliable and they can prove *ākāśa* to be non-eternal as well as they can prove *śabda* to be non-eternal. Henee *mahāvidyā* dismantling the tenets of a school can be subsumed under *pratibandi* (*tu quoque*—"If such syllogisms can establish the non-eternity of *śabda*, why cannot they also establish the non-eternity of *ākāśa*?"). Or this fault of upsetting the Vaiśeṣika tenets (or those of the school to which the arguer belongs) can be regarded as a distinct fault like the fallacies of *asiddha*, etc.[21]

Vādīndra shows how if the debaters go on arguing on the strength of *mahāvidyās* wherein each succeeding *mahāvidyā* shows the inconclusiveness of the preceding one there would not be an end to the debate, unless it be through sheer fatigue, and no party could be declared victorious. Thus it is not true to say that one who employs a *mahāvidyā* is always and everywhree victorious.[22] Vādīndra then shows at length that the *mahāvidyā* also suffers from the fault of *Arthāntaratā* (irrelevancy) as the *mahāvidyā* instead of proving, for instance, that *śabda* si non-eternal proves that it has an attribute (e.g. *śabdatva*) which is absent in *śabda* and things other than it and is present in non-eternal things. and non-eternality of *śabda* does not necessarily follow from this probandum for the relation between the two cannot be established. The probandum of the *mahāvidyā* cannot be said to rest invariably upon the non-eternality of *śabda*. The witch *Arthāntaratā* dances on the field (battle-field of debate) in its excitement to devour *mahāvidyā* with all its paraphernalia[23]. Thus the *mahāvidyās* with their bodies crushed with stones in the form of faults cannot hold the field even for a moment.[24]

It may finally be noted that according to Vādīndra, *tārkikas* like Śivāditya invented the *mahāvidyā* syllogisms because they found that the ordinary syllogisms proceeding by the method of both agreement and difference (*anvaya-vyatireki*) were subject to a number of ailments in the form of *upādhis* (extraneous or circumstantial conditions). Vādīndra takes special pains to refute these *mahāvidyā* syllogisms[25]. Could this mean that Kulārka is identical with Śivāditya Miśra ? M.R. Telang in his Introduction (p. vi) to the *Mahāvidyāviḍambana* comes to the conclusion that they are different, but that Śivāditya Miśra also seems to have made use of the *mahāvidyā* syllogisms of Kulārka and written either a commentary on the *Daśaślokīmahāvidyāsūtra* or an original work on *mahāvidyā* syllogisms from which Vādīndra quotes a verse.[26]

No one seems to have made any serious effort to revive the *mahāvidyā* syllogisms by refuting Vādīndra's criticisms. The *mahāvidyā* syllogisms had a very short span of life and even during this period it can seriously be doubted whether they carried any weight. They could be made to prove just anything and were consequently employed when the discussion had to be prolonged in the absence of weighty arguments just to confuse the other party in the vain hope of gaining a victory by chance, or preventing the other party from being declared victorious. Their status in the field of debate was similar to that of *jātis* (futile rejoinders). with this difference that the latter are based merely on possession of common or different attributes and the like without any show of *vyāpti*, whereas the *mahāvidyā*, like the ordinary syllogism, flourishes a *vyāpti* of the positive type. It would be interesting if some relation of *mahāvidyā* to earlier and later scholastic formulations could be discovered. The employment of systematic logical formalism was current as far back as Nāgārjuna if not earlier (Compare the dialectic of Sañjaya Belaṭṭhaputta and the *Saptabhaṅgī* of the Jainas).

Śrīharṣa is perhaps the most prominent among the 'orthohdox' thinkers to challenge the validity of all empirical knowledge by employing scholastic methods in philosophy. "But", as Dasgupta says "the school of abstract and dry formalism may be said to have properly begun with Kulārka Paṇḍita or the authors of *Mānamanohara* and *Pramāṇa-mañjarī* in the latter part of the eleventh century, and to have been carried on in the works of a number of other writers, until we come to Gaṅgeśa in the early thirteenth century, who enlivened it with the subtleties of his acute mind by the introduction of the new concepts of *avacchedakatā* which may be regarded as a new turning point after *vyāpti*." [27] The *mahāvidyā* syllogisms seem to have substantially helped the method of the formulation of precise definitions that was adopted by the Navya-Naiyāyikas after the Nyāya definitions were subjected to a formal criticism by the school of thought to which Śrīharṣa belonged. Nevertheless, it may be observed that none of the Navya-Naiyāyikas makes any mention of *mahāvidyā* or Kulārka, particularly in the discussion of the *kevalānvayi hetu* (purely positive probans).

NOTES

1 Yat punar atra kaiścid uktaṁ svasvetaravṛttitvānākrāntatvaṁ nama.. ..draṣṭavya iti — MVVi, pp. 6-7; also p. 76.

2 Ye tu ayaṁ śabdaḥ svasvetaravṛttitvavyatiriktānityaniṣṭhadharmādhikaraṇam iti pratijānate teṣāṁ siddha-sādhanaṁ spaṣṭam.—MVVi, p. 10.

3 See M. R. Telang's Introduction to the *Mahāvidyā-Viḍambana* (GOS, No. 12, 1920). All these texts are printed in one book.

4 Bhāṭṭā nityaṁ śabdaṁ Yaugādyā vādinas tv anityaṁ ca;
pratijānate tato'yaṁ jātas teṣāṁ vivādo'tra.
tat tasyānityatvaṁ pratipādayitum Bhāṭṭavādīndrān,
Yaugācāryo varyaḥ kṛtavān etāṁ mahāvidyām.—MVViVD, p. 2; also MVVT, p. 157.

5 Anvayi-vyatirekitvopetamūlānumāvidhau, mahāvidyānumānaṁ tu prayojyaṁ kevalānvayi. 3. śabdasyāsthiratopalakṣaṇam idaṁ sādhyaṁ tu cittepsitaṁ, dṛṣṭāntāyā ca kevalānvayitayā sthāpyāḥ padārthāḥ sarve; sarvatraiva yathārthasiddhi yugalāvṛttir vicāryā tridhe-tyādyaṁ sarvam avekṣaṇīyam akhilapraudhānumāneṣv iha. 4. —MVViVD., pp. 3, 4.

6 Tasmād avyāptabheda evāyaṁ aprayojakaḥ. tatsvabhāvānatilaṅghanāc ca *Śrīmahāvidyā-mānamanohara-pramāṇamañjary*-ādipaṭhita-vakrānumānasyāpi tathātvaṁ.—NP, p. 278, *Śrīmahāvidyā-mānamanohara-pramāṇamañjariti* granthanāmadheyāni. evaṁjātīyakā anye'pi granthāḥ santi; tatra tatra paṭhitāni parapakṣa-sādhāraṇāni vakrānumānāny-aprayojakatayā vyāpyatvā' siddhāntarbhūtāny evety arthaḥ - *Nyāyasāra*, p. 278 (Śrīnivāsa's commentary on Veṅkaṭanātha's *Nyāya-pariśuddhi*). For other references see Telang's Introduction, p, 36ff to *Mahāvidyā-viḍambana.*

7 See HIP, Vol. II, p. 121.

8 Tasya ca mahāvidyātvam asiddhatvādi-sakala-doṣavirahaḥ. prameyatvā-dīnāṁ nirṇītapakṣavṛttitvena pakṣadharmatvāsiddher asambhavāt. kevalānvayini sādhyābhāvāprasiddhau sādhyābhāvādhikaraṇa-vipakṣarūpa-vyāvartyāsambhavena yasya kasyacid upādhitvenā'bhidhīyamanasyā''-vaśyaka-pakṣetaratvadoṣagrastatvenopādhitvā'nupapattau vyāpyatvā-siddher api nirastatvāt. Kevalānvayini sādhyābhāvā'prasiddhatvenaiva ca sādhyābhāvavanmātravṛttitva-sādhyābhāvavadvṛttitva-sādhyābhāva-sādhakasamānabala-sādhyābhāvasādhakādhikabalarūpāṇāṁ viruddhatvā'-naikāntikatva-pratipakṣa-bādhānāṁ apy anupapatteḥ. —MVVi.,pp. 3-4.

9 Sā ceyaṁ mahāvidyā bahu-prakārā—kācid anvaya-vyatirekiṇaḥ pakṣaṁ pakṣīkṛtya pravartate; kācit sapakṣaṁ kācid vipakṣaṁ kācit sādhyaṁ, kācit sādhyābhāvam ityadi—MVVi., p. 5.

Vādīndra has illustrated thirty varieties of *mahāvidyā* having as their *pakṣa* the *pakṣa* of the original syllogism, twenty-two varieties having the *sapakṣa* as the *pakṣa*, twelve varieties having the *vipakṣa* as the *pakṣa*, two varieties having the *sādhya* as the *pakṣa*, one variety having as the *pakṣa* the *sādhya* of the *mahāvidyā* which proceeds as having the *pakṣa* of the original syllogism as its *pakṣa*, one variety having the *sādhyābhāva* of the principal syllogism as the *pakṣa*, one variety having as its *pakṣa* the *sādhyābhāva* of the *mahāvidyā* which proceeds as having the *pakṣa* of the principal syllogism as the *pakṣa*, one variety having a *dharma* (attribute) of the *pakṣa* of the principal syllogism as the *pakṣa*, one variety having a *dharma* of the *sapakṣa* of

the original as the *pakṣa* and one variety having a *dharma* of the *vipakṣa* of the original as the *pakṣa* (MVVi., pp. 6–73).

I have given an exposition of only the sixteen varieties given by Kulārka. The other varieties are but different manipulations of these.

10 Sarvamahāvidyānumāneṣu prāyo yugalāvṛttir vicāryā tridhā. tathā hi—yo dharmo nitye eva kevale vartate, na anitye, so'pi nityānityarūpe-yugale na vartate. tathā anitye eva kevale yo dharmo vartate na nitye so'pi nityānityayugale na vartate. tathā yo nitye anitye'pi ca na vartate, so'pi nityānityayugale na vartate. ātmā śabdetarānityanityavṛttitvarahitā'-nityavṛttidharmavān ity atra cā'numāne pakṣīkṛte ātmani sādhyo dharmaḥ śabdātmānyānyatvādiḥ. sa ca nitye ātmani vartate, na śabdetarānitye. tataḥ sa śabdetarānityanityarūpayugalāvṛttir ity ucyate — MVVT., p. 158.

11 MVV, p. 166 and *Ṭippaṇa* on it.

12 Atha vyāvṛttya-cintā—ākāśo nityavṛttidharmavān iti kṛte sattayā siddha-sādhanam, tadarthaṁ śabdetareti padam. tathā'pi ghaṭākāśasambandhaḥ śabdetarānityaghaṭe eva vartate iti tena siddha-sādhanam. tadvyāvṛtty-artham anityavṛttitvānadhikaraṇeti padopādānam. tathā'py ākāśa-paramāṇusaṁyogaḥ śabdetarānityavṛttitvānadhikaraṇo bhavati, nitye paramāṇāv eva vartanāt. atas tena siddasādhanaṁ tadartham anityavṛttīti padagrahaṇam. tenedṛśam anumānaṁ syāt——ākāśāḥ śabdetarānityavṛtti-tvānadhikaraṇā' nityavṛttidharmavān iti. tathāpy evaṁvidhadharmasya anyatra adṛṣṭacaratvād aprasiddhaviśeṣaṇaḥ pakṣaḥ. na hi anitye vartate, śabdetarānitye ca na vartate iti dharmāḥ saṁbhavati. yo hi anitya-vṛttiḥ sa śabdetarānitye vartate yathā-ghaṭatvādi. tathā ca sapakṣābhāvena anvayitvam eva vyāhanyate, tadartham akāśa-grahaṇam. tathā ca na kaścid doṣaḥ. ākāśa-śabdetarānityamelake yo na vartate, (saḥ) anityavṛttir api bhavati. evaṁbhutaś ca dharmo dṛṣṭānte ghaṭe ghaṭātmānyonyābhāvo'-pi saṁbhavati. ākāśe tv evaṁbhūto dharmas tadā syād yadi śabdasyā-nityatvaṁ syāt sa ca śabdākāśānyonyābhāvaḥ eva.—MVV., pp. 167-168.

13 According to Bhuvanasundara it is not necessary to insert the term '*apakṣa*' in '*apakṣasādhyavadvṛtti. . .*', because the *pakṣa* itself of the principal syllogism is made the *pakṣa* here and not the *vipakṣa* as in the previous cases. Consequently the *sādhya* here is *anityatva* and not *śabdātmānyonyābhāva*, in which case it would be necessary to say '*apakṣa*' or '*śabdetara*. .'; because if it were omitted, the *sādhya* would be present in the eternal *ātman* and the non-eternal *śabda* and so the condition of its being jointly absent in the pair of eternal and non-eternal things would not hold good; whereas here the probandum is affirmed of the *pakṣa* which is also the *pakṣa* of the principal inference, and

it is present in non-eternal thing alone, not in eternal things, so '*aśabda*' is useless (*asyām kārikāyam atha veti vaktavye mahāvidyākartur apakṣeti padaṁ pramādāt patitam. 'atha vā sādhyavadvṛtti-vipakṣānvaya-varjitaḥ' iti tu pātho yuktaḥ..tasmād atrā'śabdeti padaṁ vyartham.*—MVVT., p. 169).

The author of *the Mahāvidyāvivarana* has made an attempt to justify the inclusion of the expression '*apakṣasādhyavat..*' or *aśabdānitya..*' If the proposition were simply '*śabdo'nityanityavṛttyanyonānityavṛttyaśabda-dharmavān*', since according to the opponent *śabda* is eternal, the *sādhya* would not be one that is not existent in the pair of eternal and non-eternal things, as it would be found in eternal *śabda* and non-eternal jar. Thus even though the probandum 'non-eternality' is proved, yet since such an attribute is not found in *ākāśa*, etc. purely positive concomitance would be nullified as a *vipakṣa* would be there. Hence the term '*aśabda*' is inserted; and then though the mutual negation or difference from *śabda* is present in *ākāśa*, etc, and so is said to be absent in eternal and non-eternal things, yet it is existent in non-eternal things other than *śabda* and in eternal things so there can be no suspicion whatsoever as to the lapse of concomitance (MVV., p. 170).

14. Evaṁ tejastvādyanumānam ūhyam. tathā hi uṣṇavantaḥ uṣṇavadanuṣṇā-vṛttyuṣṇavadvṛttyavṛttyanyadharmavantaḥ meyatvād ghaṭavad ity ādi. MVV., p. 172.

15. Gandhavattvena gandhavanniṣṭhasaṅkhyayā gandhavadvyatirikta-viśva-pratiyogikātyantābhāvena ca siddhasādhyatādoṣād iyaṁ mahāvidyā kuśalataraiḥ prayatnataś cintanīyā—MVVT., p. 173.

16. Tena nityatvena saha tādātmyaniṣedho' nyonyābhāvaḥ śabdasyeti jñeyaḥ. śabdo nityatvaṁ na bhavatīti svarūpaḥ. tasmād anyonyābhāvāt anyo yaḥ tatsthābhāvaḥ saṁsargābhāvaḥ śabde nityatvaṁ nāstīti svarūpaḥ, tadvirodhitā tasmin pratiyogitā sādhyate. nityatvasyeti śeṣaḥ.—MVV., p. 175.

17. Atrā "kāśam ākāśād anyad evam api vadane arthasya ananyatvam eva, param mahāvidyānumānatvena kiñcid vakracchāyayoktam. evaṁ ca sarveṣām ekatvena aṅgīkṛtānām anekatvaṁ sādhanīyam.—MVVT., p. 178.

18. Śabdaḥ śabdanityāvṛttidharmavān meyatvāt ghaṭākāśādivat. śabdaś cā'sau nityaś ca śabda-nityaḥ tatra yo na vartate dharmaḥ tadvān śabdaḥ. evaṁvidhaś ca śabdatva-śrāvaṇatvādiḥ sādhyo dharmaḥ. atra yadi śabdo nityo'ṅgīkriyate tadā śabdatvādir dharmaḥ śabda-nityāvṛttir na bhavati, śabdarūpe nitye vartanāt. tasmāc chabdasyā'nityatvam aṅgīkāryam iti pariśeṣāc chabdānityatvasiddhiḥ.—MVVT., p. 186.

19. Mahāvidyādūṣaṇe pravṛttasya tad-vyākhyānam asaṅgatam iti cet, na. mahāvidyāvādinā kiṁ sabhya-viditārtha-prativādiduradhigama-mahāvidyāprayogā'nantaram ajñānena prativādinaṁ nigṛhyā''tmano vijayo bhāvanīyaḥ, kiṁ vā prativādividitārtha-mahāvidyādūṣaṇā'-pratibhayā prativādinaṁ nigṛyhyā''tmano vijayo bhāvanīyaḥ. nā''dyaḥ yataḥ

iti gūḍhamahāvidyāvyākhyā kautūhalacchalāt.

dūre nirastam asmābhir ajñānaṁ prativādinaḥ.4.

yad vā samyak-sādhanā' parisphūrtau Saugatādīn prati mahāvidyāḥ prayoktavyāḥ samyagdūṣaṇā'parisphūrtau jātyādivat, iti tadvyākhyānaṁ nānupayogi. yad āhuḥ Śivādityamiśrāḥ.

"Pakṣatadbhinnavṛttitvarahitatvānurañjitaḥ,
dharmaḥ sādhyavataḥ sādhyo meyatvāt pratibhā-kṣaye."

iti.dvitīyaṁ tu pakṣaṁ mahāvidyāgocarasugamadūṣaṇa-vyutpādanena nirākariṣyāmaḥ.—MVVi., pp. 74–75.

20 Na ca Vaiśeṣikādīnāṁ kevalānvayinaṁ nirākurvatāṁ apasiddhāntaḥ. Sūtrakāra-Bhāṣyakārābhyāṁ kvacid api tad-avyutpādanāt. Ṭīkākārādīnāṁ cā'smābhir anādaraṇāt. ādaraṇe vā tadīya-kevalānvayi-vyutpādanasya paramatatvena vyākhyānāt.—MVVi, p. 98.

21 Kiṁ ca sakala-mahāvidyānāṁ siddhānta-viplāvakatvaṁ nāma dūṣaṇaṁ. tathā hi—gaganādayaḥ svasvetaravṛttitvarahitā'nityaniṣṭhādhikaraṇaṁ meyatvād iti, pārthiva-paramāṇuḥ svasvetaravṛttitvarahita-nityarūpādimanniṣṭhādhikaraṇaṁ meyatvād iti, āpyādi-paramāṇuḥ svasvetaravṛttitvarahita-pākajarūpādimanniṣṭhādhikaraṇaṁ meyatvād iti, īśvaraḥ svasvetaravṛttitva-rahitā'nityajñānecchāprayatnadharmādharma-sukha-duḥkha-dveṣa-bhāvanāvanniṣṭhādhikaraṇam meyatvād ityādeḥ sarvatra suvacatvāt. na caivamadīnām āgamabādhaḥ. vivādapadam āgamaḥ svasvetara-vṛttitvarahitā'pramāṇaniṣṭhādhikaraṇaṁ meyatvād ityādeḥ tatprāmāṇyapratikṣepe'pi suvacatvāt.

atha siddhānta-viplāvakatvaṁ kutrā'ntarbhavatīti pṛcchasi, tarhi na kvacid ity avehi. yathā asiddhatvādayaḥ pṛthag eva dūṣaṇam evam idam api. yad vā pratibandyām asyāntarbhāvaḥ. yady evaṁvidhair anumānaiḥ śabdā'nityatvaṁ sādhyate, tarhi gaganānityatvam api kasmān na sādhyate iti.—MVVi, pp. 128-130.

22 MVVi, pp. 134-135.

23 MVVi, pp. 136-147.

Athārthāntaratā nāma kṛtyā nṛtyati sāṅgare.
saprapañca-mahāvidyāgrāsakautūhalākulā. 19.

śabde śabda-tadanyavṛttirahitā'nityasthavattve mite,
nityatva-pramitiḥ kathaṁ na hi tayor aikyaṁ na ca vyāptatā;
no sāmānya-viśeṣatā na ca tato bodhe prakārāntaraṁ,
saiṣā'rthāntaratā'khilām api mahāvidyāṁ samāskandati. 20.
—MVVi, p. 136.

24. Iti dūṣaṇa-pāṣāṇa-jarjarīkṛtamūrtayaḥ,
mahāvidyāḥ kṣaṇaṁ sthātuṁ na kṣamante raṇāṅgane. 21.
—MVVi. p. 149.

25. Upādhi–vyādhi–nirdhūtam anvaya-vyatirekiṇam,
matvodbhinna-mahāvidyāḥ Śivādityādi-tārkikāḥ. 2.
teṣām eṣa viśeṣeṇa nirākaraṇa-saṁbhramaḥ.
ŚrīSiṁhadharmādhyakṣeṇa Vādīndreṇa vidhīyate. 3.
—MVVi, p. 99.

26. Yad āhuḥ Śivādityamiśrāḥ—
pakṣa-tadbhinnavṛttitvarahitatvānurañjitaḥ.
dharmaḥ sādhyavataḥ sādhyo meyatvāt pratibhā-kṣaye. iti.—
MVVi, p. 74;

iyaṁ ca kārikā mahāvidyāgranthā'ntarasthitā, atra granthe 'ayaṁ śabdaḥ svasvetare'tyādi prathama–mahāvidyārthasaṅgraha-pratipādikā'-vagantavyā.—Bhuvanasundara's commentary on the above, p. 75.

27. HIP, Vol. II, p. 124—S. N. Dasgupta.

CHAPTER 9

COMPONENT FACTORS and PROCEDURE OF DEBATES

With regard to the component factors of debates and the procedure according to which controversies or debates are conducted, we find some explicit details in the *Caraka-Saṁhitā* (—these have already been noted—), the *Saptadaśa-bhūmiśāstrayogacaryā* of Maitreya, the *Abhidharma-samuccaya* of Asaṅga, and in Vādi Devasūri's *Pramāṇanaya-tattvālokālaṅkāra* (Ch. VIII), Viśvanātha's *Vṛtti* on the *Nyāya-sūtra*, Veṅkaṭanātha's *Nyāya-pariśuddhi* and Śaṅkara Miśra's *Vādivinoda*, though some information can be had from Akalaṅka's *Siddhi-viniścaya* (V), Vidyānanda's *Jaina-Tattvārthaślokavārttika*, pp. 279–280, and other works.

Maitreya, or his disciple Asaṅga, was perhaps the first to introduce dialectic among the subjects to be studied by a *bodhisattva* without forsaking the principles of *Vijñānādvaita* (the doctrine of consciousness as the only ultimate reality) and Vasubandhu followed up by undertaking the treatment of dialectic in his *Vādavidhi*, *Vādahṛdaya*, and other works, mostly according to the Nyāya system. In the *Yogacaryābhūmi-śāstra* of Maitreya or Asaṅga, there is a section on the art of debate. It consists of seven sections—(1) *Vāda* or debate; (2) *Vādādhikaraṇa*, the place where the debate is held; (3) *Vādādhiṣṭhāna*, the basis or the support of debate; (4) *Vādālaṅkāra*, adornment of speech or debate; (5) *Vādanigraha*, defeat in a debate; (6) *Vādasambhava*, that which derives or comes from a debate; (7) *Vāde bahukarā dharmāḥ*, causes of a debate being appreciated by the hearers.

(1) *Vāda* is said to be of six kinds—(*a*) *vāda*, statements of all persons in general, (*b*) *pravāda*, statement by which the people are pleased as it is acceptable to them, (*c*) *vivāda*, disputation, when two persons engaged in discussion maintain quite different opinions about a particular object or thesis, (*d*) *apavāda*, unpleasant and cruelly bitter words, (*e*) *anuvāda*, statement in accordance with *dharma* (righteousness) and aiming at producing right knowledge, (*f*) *deśanā-vāda*, teaching aimed at inducing concentration or the attainment of release.

(2) *Vādādhikaraṇa*, place of debate—before a king or a governor, or in a great assembly (*pariṣat*) or before *śramaṇas* who are well versed in the *dharma* or before *Brāhmaṇas* or before those who would like to hear the *dharma*.

(3) *Vādādhiṣṭhāna*—means of debate, viz. *sādhya* (thesis) and *sādhana* (proof). The *sādhya* or that which is to be proved is two-fold according as it concerns one's self or another. The *sādhana* which helps in establishing the thesis may be of eight kinds—(*i*) *siddhānta* (proposition), (*ii*) *hetu* (reason), (*iii*) *udāharaṇa* (example), (*iv*) *sādharmya* (similarity), (*v*) *vaidharmya* (dissimilarity), (*vi*) *pratyakṣa* (perception), (*vii*) *anumāna* (inference) and (*viii*) *āgama* (verbal or scriptural testimony). The *Abhidharma-samuccaya* enumerates here *pratijñā*, *hetu*, *dṛṣṭānta*, *upanaya*, *nigamana*, *pratyakṣa*, *anumāna* and *āptāgama* (See *Abhidharma-samuccaya*, p. 105–Viśva Bhāratī Series).

(4) *Vādālaṅkāra* is six-fold—(*a*) perfect knowledge of one's own as well as of another's system, (*b*) perfection of phrase (—speech must be devoid of rustic expression, easy, evident, coherent, having a good meaning); (*c*) fearlessness or confidence under any circumstances, even when the *pariṣat* (assembly) is numerous or hostile; (*d*) firmness, (*e*) politeness, (*f*) uninterrupted flow of statements (*pratibhāna*). Power of perfect understanding, expression and exposition and a dignified approach are the guiding factors here,—to be able to explain clearly what has been said by the opponent or *anubhāṣaṇa* being comprised therein.

(5) *Vāda-nigraha* (points of censure or defeat)—the *nigraha-sthānas* would come under this head.

(6) *Vāda-sambhava* comprises-(*a*) *guṇa-doṣa-parīkṣā*, examining whether the discussion undertaken would be of some use to the debaters and the audience, and avoiding it if no good result is to be expected from it; (*b*) *pariṣat-parīkṣā*, ascertaining whether the assembly is partial, learned, or strictly honest; (*c*) *pāṇḍityāpāṇḍityaparīkṣā*, examining whether one has the knowledge and the ability necessary to carry on the debate satisfactorily. If an aspirant acknowledges that he is not possessed of the requisite and indispensable qualities, he must give up debating.

(7) *Vāde bahukarā dharmāḥ*, the characteristics which cause a speech to be appreciated by the audience are—(*a*) knowledge of one's own and the other's system of thought (*sva-paramata-jñāna*), (*b*) absence of fear (*abhīrutā*); (*c*) promptitude of intelligence (*pratibhāna*).[1]

Ordinarily, a debate is regarded as having four *aṅgas* or component factors—(i) *vādin*, proponent; (ii) *prativādin*, opponent; (iii) *sabhyas* or members of the assembly (*pariṣat*); (iv) *sabhāpati* or president. We have an interesting and realistic description in the *Caraka-saṁhitā* of the *vādin*, the *prativādin*, the members of the assembly as also the circumstances under which the *vigṛhya saṁbhāṣā* should be entered into. The *Caraka-Saṁhitā* also gives us some practical advice to be followed by the parties to avoid discomfiture. This has been discussed earlier to give a complete picture of Caraka's treatment of *vāda*. This may be compared with advantage with Siddhasena's treatment of the subject in the *Vādopaniṣad Dvātriṁśikā*.

Generally a genuine *vāda* does not require all the four *aṅgas* (component factors) as the parties may have their respective thesis to start with, but being free from malice and rivalry they do not require the intervention of any third party—*sabhya* or *sabhāpati*. As Viśvanātha says, they arrive at a

conclusion and determine the true nature of things by themseleves. If the debaters are desirous of victory, the presence of the *sabhyas* and *sabhāpati* is essential. Public debates were held in the past, as in the present times, wherein the parties were *jigīṣu* (desirous of victory) and the debate was *caturaṅga* (having four components).[2] Vādi Devasūri is of the view that *caturaṅga kathā* (debate with four components) is possible if at least one of the parties is *vijigīṣu*. This might be his position as against the earlier logicians such as Akalaṅka and Vidyānanda. Hemacandra seems to be following the latter in this respect. According to him if even one of the *aṅgas* be wanting it would forfeit its title to be regarded as a legitimate debate. Neither the *vādin* nor the *prativādin* can hope for success in the pursuit of the methods of proof and refutation according to his own convictions unless there be present for maintaining order in the assembly judges (*prāśnika*) and a president It is not possible that the ordinary people, who have no independent judgement and are apt to follow blindly in the wake of others, should unhesitatingly pursue the path of righteousness once their convictions are set aside by a set of fools, who puffed up with their false education are vociferous in the use of tricky arguments for subverting the set moral order, unless there be judges and a president to guide them.

The members (*sabhyas*) or judges (*prāśnikas*) should be highly learned, acquainted with the different schools of philosophical thought, men of high lineage, readily acceptable to both the parties, tolerant, veterans in the field of debating, and therefore fully acquainted with its methods and rules, and as impartial as the weighing balance. The president (*sabhāpati*) should be impartial, and have equal consideration for both parties, should be capable of discriminating between right and wrong procedure and should be able to make the people observe the duties incumbent upon the different castes and stages of life, otherwise the people would be misguided by clever debaters of the heretical type.[3] As Vādi Devasūri says, the *sabhāpati* should be endowed with intelligence, power to

command, dignity, forgiving nature and impartiality. His function is to understand the point of view of the debaters and the *sabhyas* (members or judges) and avert a quarrel between the debating parties (—by saying that he who is defeated shall become the disciple of the victor, and the like), and give away prizes and so on. The president's need is felt when the debaters refuse to accept the verdict of the *sabhyas* or when there is difference of opinion among the *sabhyas* and in like circumstances.[4] Viśvanātha says that the *sabhā* or the *pariṣat* sitting in judgement in a debate consists of the following men—(i) *anuvidheya*, a powerful king or the like who makes his commands felt and obeyed by all, (ii) impartial members (*Anuvidheya-stheyaḥ-sabhya-puruṣavatī janatā sabhā; anuvidheyo rājādiḥ stheyān madhyasthaḥ*–NSV, p. 67) * . Vādi Devasūri says that the *sabhyas* should be acceptable to both the parties by virtue of the knowledge of the doctrines of the systems of thought of both the *vādin* and the *prativādin*, intelligence, retentive grasp, vast learning, capacity to answer on the spot or genius (*pratibhā*), tolerance and impartiality. If the parties in a debate have not decided for themselves who is to set forth and establish a thesis, and who is to refute it and set forth a counter-thesis, then the *sabhyas* decide which party is to argue for a thesis and which for its counter-thesis, as also fix the type, the method and procedure of the debate and decide who is to speak first and who after. The *sabhyas* determine the merits and drawbacks in the arguments advanced by the two parties in support of their own view and in refutation of the other party's reasoning. The *sabhyas* bring the debate to an end by revealing the correct position or the truth at the proper time when one party obstinately refuses to accept the conclusion established by the other, or both refuse to accept

* Are males alone meant by the word '*puruṣa*'? Viśvanātha hailed from Bengal where women usually observed purdah and so did not attend public assemblies. Ratnaprabhācārya, on the other hand, explicitly refers to both males and females as participating in debates. The Jaina nuns and along with them other women attended such assemblies in which religious and philosophical problems were discussed.

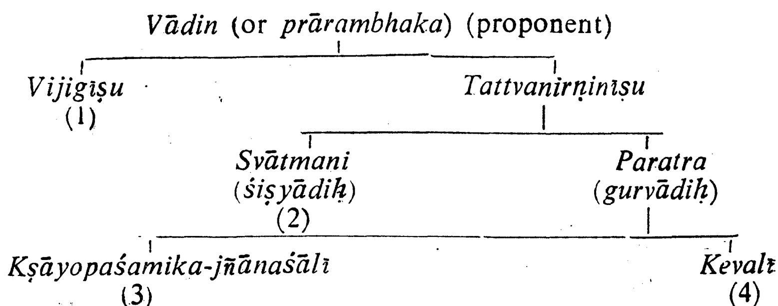
defeat and argue away from the truth. The *sabhyas*, moreover, announce the result of the debate, their decision bring regarded as final.[5] It may be noted that the qualifications of the *sabhya* and the *sabhāpati* as mentioned by the different logicians are essentially the same, as this was the general ideal prevalent in the country.

The *vādin* and the *prativādin* (—these being relative terms of course—) logically establish their own thesis and refute the thesis of the opponent. Normally both these have to be undertaken by either party, except, for example, when the *viruddha hetvābhāsa* (fallacy of contrary probans) is urged against the opponent's argument, when refutation of his position implies or is equivalent to the establishing of one's own position, or when after the *vādin* has in the first stage (*kakṣā*) of the debate establised his thesis and avowed that there is no fallacy whatsoever in his argument, if the *prativādin* does not say anything in the second stage (*kakṣā*), then the establishing of one's own view becomes equivalent to the refutation of the opponent's view.[6] Ratnaprabhācārya says in his commentary *Ratnākarāvatārikā* on *Pramāṇanayatattvālokālaṅkāra*, VIII. 2, that the *vijigīṣu* (one desirous of victory) starts the debate in a highly defiant and arrogant tone whereas the *tattva-nirṇinīṣu* (one desirous of determining the truth) is meek and mild and eager to acquire knowledge. There might be one or more persons in either party—males or females. Viśvanātha says that such persons are worthy of entering into a debate as are desirous of determining the truth or of achieving victory, are capable of taking into consideration the universal experience of man, are quick at hearing, seeing, understanding, etc , are not quarrelsome and are competent to perform the operations or functions useful in a debate, since *kathā* or a debate is a composition of statements, which is strictly in accordance with logic and is capable of either determining the truth or achieving victory.[7] Those qualified for *vāda* from among the three kinds of *kathā* (*vāda*, *jalpa*, *vitaṇḍā*) are those who are eager to know the truth, who speak only what is relevant to the point at

issue, are not deceitful, are prompt to answer, are not apt to make false allegations and who readily accept what is established by reasoning.[8] Of course, they must also be indifferent to worldly gains like wealth, fame, honour etc.

The Jaina logicians say that *vijigīṣus* deserve to enter into a debate with the four *aṅgas*, components. But *vijigīṣu* for them, as said before, means one who desires victory which consists in the logical establishment of one's thesis. So the *vijigīṣu* for them is almost a *tattvanirṇinīṣu* (one who desires to determine the truth). Some Jaina logicians nevertheless have recognised *vāda* between dispassionate persons (*vītarāga*) who are not *vijigīṣu* (desirous of victory). Such a *vāda* does not require all the four *aṅgas*. The difference between the *tattva-nirṇinīṣu* and the Jaina *vijigīṣu* (one who desires to attain victory that is to say to establish his own thesis) is that the former follows strictly the path of logic and does not stand in need of any intervention by a *sabhya* or a *sabhāpati*, whereas the latter though following the path of logic as far as possible, is not so free from rivalry and malice as to accept the other's position without being advised to do so by a third party (*sabhya* or *sabhāpati*).

Vādi Devsūri has dealt at length with the different kinds of debaters and with the corresponding requirements of the debate. The *vādin* may be a *jigīṣu* or a *tattva-nirṇinīṣu*, the latter being such for himself (–when he is a student and the like–) or for imparting it to others (–when he is a preceptor and the like–), this last again being possessed of knowledge influenced by the destruction-cum-subsidence of *karman*, or a *kevalin* (omniscient person).



The *prativādin* or the *pratyārambhaka* (opponent) also can be of any of these kinds (see PNTL., VIII. 2-9).

Ratnaprabhācārya mentions the kinds of parties between which a debate is possible and those between which it is not possible. There can be no *vāda* between (a) *vijigīṣu vādin* and *svātmani tattvanirṇinīṣu prativādin*, (b) *svātmani tattva° vādin* and *vijigīṣu prativādin* (as their objectives are different), (c) *svātmani tattva° vādin* and *svātmani tattva° prativādin* (as neither is sure and both stand in need of corroboration of their views), (d) *paratra tattva° kevalin vādin* and *paratra tattva° kevalin prativādin* (as both being omniscient would know the truth and there could be no difference of opinion between them).

But a debate is possible between—(a) *vijigīṣu vādin* and *vijigīṣu prativādin*, (b) *vijigīṣu vādin* and *paratra tattva° kṣāyopaśamikajñānaśālin prativādin*, (c) *vijigīṣu vādin* and *paratra tattva° kevalin prativādin*, (d) *svātmani tattva° vādin* and *paratra tattva° kṣāyopa° prativādin*, (e) *svātmani tattva° vādin* and *paratra tattva° kevalin prativādin*, (f) *paratra tattva° kṣāyopa° vādin* and *vijigīṣu prativādin*, (g) *paratra tattva° kṣāyopa° vādin* and *svātmani tattva° prativādin*, (h) *paratra° tattva° kṣāyopa° vādin* and *paratra tattva° kṣāyopa° prativādin*, (i) *paratra tattva° kṣāyopa° vādin* and *paratra tattva° kevalin prativādin*, (j) *paratra tattva° kevalin vādin* and *svātmani tattva° prativādin*, (k) *paratra tattva° kevalin vādin* and *paratra tattva° kṣāyopa° prativādin*. (See *Ratnākarāvatārikā* on PNTL., VIII. 9).

According to Vādi Devasūri, all the four *aṅgas* are not essential in every debate. The four *aṅgas* are indispensable in a debate between *vijigīṣu vādin* and (a) *vijigīṣu prativādin*, (b) *paratra tattva° kṣāyopa° prativādin*, or (c) *paratra tattva° kevalin prativādin*, because where either the *vādin* or the *prativādin* is desirous of victory, order cannot be maintained in the assembly without the *sabhyas* and the *sabhāpati*. But it is possible to conduct a debate between *svātmani tattva° vādin* and *paratra tattva° kṣāyopa° prativādin* with two or three *aṅgas*.

The *vādin* and the *prativādin* may come to a conclusion between themselves, or if necessary the help of the *sabhyas* may be sought. If *svātmani tattva° vādin* enters into a discussion with a *paratra tattva° kevalin prativādin*, even the *sabhya* is not required, and so there are only two *aṅgas* in such a debate. If a *paratra tattva° kṣāyopa° vādin* has a discussion with a *vijigīṣu prativādin*, the four *aṅgas* are essential; if with a *svātmani tattva° kṣāyopa° prativādin* or a *paratra tattva° kṣāyopa° prativādin* two or three *aṅgas* are essential; and if with a *paratra tattva° kevalin prativādin* then only two *aṅgas* are necessary. The discussion of a *paratra tattva° kevalin vādin* with a *vijigīṣu prativādin* requires four *aṅgas*; and with a *svātmani tattva° prativādin* or with a *paratra tattva° kṣāyopa° prativādin* two or three *aṅgas*.[9]

Procedure of a debate — At the outset the *sabhyas* or *prāśnikas* (judges) and the *sabhāpati* or *anuvidheya* (president possessing the above mentioned qualities are selected. Where the different arguments are to be jotted down a scribe (*lekhaka*) acceptable to both the parties is appointed. Then fi it is not already decided, these *sabhyas* and *sabhāpati* decide as to who should argue in favour of a particular proposition and who against it, that is to say, who should be the *vā din*and who should be the *prativādin*, as also what type of debate it should be and what the subject should be, and what the manner of its treatment. In a *vāda* it is not compulsory to select the *sabhyas* and the *sabhāpati*, because the debaters do not aim at victory and are utterly dispassionate. The *sabhyas* may be installed as such if they happen to come by chance as God-send, but in no case is the *anuvidheya* required in a *vāda* for he only gives the award of victory. There should be three or more judges of an odd number, so that in the event of a difference of opinion the result could be decided by the view of the majority. There can also be only one judge if he is highly intelligent.

When the debate is to be conducted in a highly formal manner, it is decided at the very outset as to what particular

language is to be used, whether a change in the language is permissible or not, whether the debaters should as a rule speak in prose, which particular *pramāṇas* are to be recognised as independent sources of valid knowledge, whether the *Mahāvidyā* syllogisms could be employed or not, whether the arguments are to be necessarily put on paper, whether symbolic gestures, writing on the ground, etc. are to be avoided or not, whether one should urge all the *nigrahasthānas* that could be detected in the other party's argument or the exposure of one of them would suffice, how much part of the opponent's argument is to be reproduced, how many members of a syllogism are to be put forth, or each party should follow the practice of his school and so on and so forth. The smallest details have to be fixed at the very beginning and then the debate starts in right earnest and the debaters have to follow these rules, otherwise they would be subject to 'checks'. Ordinarily the debate comes to an end when the *nigrahasthānas hetvābhāsa*, (*apasiddhānta*) and *niranuyojyānuyoga* are urged in the opponent's argument; in other cases the opponent corrects himself or explains his behaviour and the debate proceeds.[10]

The umpire (*madhyastha*) or judge presents the *vipratipatti-vākya*, the statement regarding the point at issue, about a thing being variously held as having two different characters, e.g. 'Is word (*śabda*) eternal or non-eternal?' The necessity of the *vipratipattivākya* has been shown by the authors of many works inasmuch as it introduces or engenders doubt or desire to establish his thesis in the debater, this being necessary as a forepart of debate (see *Advaitasiddhi*, pp. 16–17). Some logicians notably of the school of Madhva contended that the presentation of the *vipratipatti* is made only in conformity with the convention of the logicians; it has not any real standing in actual discussions (vide *Nyāyāmṛta*, p. 8). After the presentation of the point at issue the two parties take up their respective positions.

To start with the *vādin* adduces proof in support of his thesis. He also verifies his argument by means of *tarka* (hypothetical

reasoning). Then in a general way he says that his is not a fallacious reason, or he anticipates and repudiates any objections that are likely to be raised against his reason, say in particular that it is *asiddha* (unreal), *viruddha* (contrary) and the like. This is called *kaṇṭakoddhāra* (extrication of thorn). This is the first stage (*kakṣā*) of the debate. Then in order to indicate that he has understood all that the *vādin* said, the *prativādin* reproduces the entire statement (–or as much as was decided before–) of the *vādin* and tries to apply a 'check' by urging a *nigrahasthāna*, failing which he tries to refute the *vādin*'s argument on the ground of some fallacy really non-existent in his reasoning. He then sets forth and establishes his own view. This is the second stage. In the third stage, the *vādin* reproduces the statement of the opponent and repudiates the charge brought against his position by the *prativādin*, and in his turn refutes the thesis or the argument of the *prativādin* by trying to expose some fallacy of reason in it if he cannot detect any other flaw. And thus the argument proceeds from state to stage till the debate comes to an end and the final result is announced by the *pariṣat* (assembly or council).[11] As a rule, a *vādin* establishes his own thesis on the strength of principles and tenets acceptable to his own school, but when refuting the opponent he does so on the latter's ground, that is to say he takes for granted the opponent's views and assumptions and shows the absurdity of his thesis or points a flaw in his argument (*Svanyāyaiḥ sādhanaṁ kāryaṁ paranyāyaiś ca dūṣaṇam—Anuvyākhyāna* as quoted in TT, Vol. 4, p. 155). It may be noted that the convention with regard to reproduction is that if the opponent's rejoinder is of the *jāti* type, or is a semblance of a refutation, a debater should not reproduce it but should only point out the flaw, otherwise he himself would be subject to a 'check'.[12]

Śaṅkara Miśra has, in his *Vādivinoda*, illustrated a debate of the type of *vāda* up to seventeen *kakṣās*.[13] He says that there is no rule as regards the number of *kakṣās* of a *vāda*; it may even go on for two days till the thesis of one of the

debaters is established and the other's confuted. The debaters do not go on arguing in a *vāda* simply because they are able to answer. The proving of a thesis and the determination of truth being the main purpose, a *vāda* is brought to an end when the conclusion is arrived at.[14] There are not very hard and fast rules in regard to a *vāda* and only such *nigrahasthānas* are urged, the urging of which contributes to the understanding of truth. A *jalpa*, on the other hand, should be carried on strictly according to the rules and conventions accepted at the very outset for its conduct. A *jalpa* generally proceeds up to six *kakṣās*.[15] Śaṅkara Miśra has similarly illustrated a *vitaṇḍā* up to nineteen *kākṣās*; intelligent debaters do not stop arguing soon in a debate, and the opinion or judgement of the judges has to be accepted.[16]

Vādi Devasūri has discussed the problem of the time-limit of the debate. If one of the debaters is a *vijigīṣu* or both are such then the time-limit depends on the wish of the members (*sabhyas*) and the capacity of the speakers, but if both the parties are *tattvanirṇinīṣu*, then they go on debating till they arrive at a conclusion or till they feel that they can argue no more.[17] Ratnaprabhācārya has given us, in his commentary on the *Pramāṇa-naya-tattvālokālaṅkāra* VIII. 22, an accurate and lively description of the stages of a debate, as also of the devices and 'checks' employed by each of the two parties to achieve victory over the other.

Ratnaprabhācārya also says that a debate can go on with the permission of the assembly (*pariṣat*) till the time the disputants are energetic and competent enough to carry it on. He gives a few hints to the effect that one can point out the fault in the opponent's reasoning either once or in a number of ways according as the members (*sabhyas*) of the assembly are satisfied, or desire a repetition in different ways. One can point out as many faults as are present in the other's reasoning if the assembly so desires, but these faults should be stated one by one. Or if the assembly is satisfied with the pointing out of one fault it is not necessary

to point out the others. All this, as said before, depends on the rules and conditions that have been laid down at the very beginning by the *sabhyas*.[17]

We have discussed the problem of the determination of victory and defeat in a debate (*jaya–parājaya-vyavasthā*) in the chapter on ' Checks in Debate '.

The *Nyāya-sūtra* has illustrated a *saṭpakṣī kathābhāsa*—a futile debate with six steps (NS. 5.1. 39–43). A *kathābhāsa* is that where no conclusion is arrived at or where neither party is declared victorious. As Vācaspati says, normally when the *prativādin* puts forth a *jāti* type of argument he is met by the *vādin* with a suitable answer, and in every such case the debaters come to an understanding about the true conclusion. But there are instances when the *vādin* also meets the *prativādin* with a fallacious argument or futile rejoinder; in that case no right conclusion is arrived at and an entirely futile debate is carried on up to six steps or stages. The author of the *Nyāya-sūtra* has illustrated such a *kathābhāsa* for the benefit of the pupils, so that they might not indulge in, or encourage any such futile controversy[19] :

First step —(*Vādin*)-Word (*śabda*) must be non-eternal, because it is the outcome of effort (*prayatnānantarīyakatvāt*).

Second step--(*Prativādin*)-Your probans is inconclusive, so it cannot prove the conclusion (—Even eternal things can be an outcome of effort inasmuch as they are perceived after effort—*kāryasama-jāti*).

Third step—(*Vādin*)-Your denial (*pratiṣedha*) also is equally inconclusive (—There is no special reason why it could be held that word is manifested and not produced).

Fourth step—(*Prativādin*)-With the contravention (*vipratiṣedha*) of the denial also there can be found the same fault as is found with the denial itself.

Fifth step—(*Vādin*)-The contingency of the same fault being present in the contravention of the denial is urged (by the *prativādin*) after admitting the presence of the fault in his own contention, and this involves *matānujñā* (confessing the opponent's charge).

Sixth step—(*Prativādin*)-After having admitted what was urged against his own argument, the *vādin* urged the presence of the same fault in the *prativādin's* argument (in the third step) and put forward reasons for the same. Thus, he has admitted the presence in his own view of the fault urged against the *prativādin*'s view, so that the fault of *matānujñā* is equally applicable to him also.[20]

The author of the *Upāyahṛdaya* has similarly illustrated *ṣaṭpakṣī kathā* (see UH, pp. 24–25). It can be seen that there is needless repetion in the *ṣaṭpakṣī kathābhāsa* and neither of the two views comes to be established. If however the third step in answer to the opponent's denial or refutation (which is really futile) had been a suitable answer, and not just an allegation, the original proposition would have been demonstrated that what happens to *śabda* after effort is that it comes into existence and not that it becomes manifested, and then there would have been no scope for the *ṣaṭpakṣī kathābhāsa.*[21] It is because of this that logicians recommend that a proper faultless answer should be given even to a *jāti type* of refutation.[22]

Veṅkaṭanātha, the author of the *Nyāya-pariśuddhi*, says that the Naiyāyikas believe that a *kathābhāsa* can have from two to six steps or stages because a debate having only one stage is not possible and the judges or members of the assembly (*sabhya*) would not permit the debate to be carried beyond six stages. But there can be a debate having only one state as also one having more than six states. If the debate does not get a proper start, or is not carried on due to lack of *pratibhā*, the

debate would at once come to an end. If even after undertaking to enter into a debate, the *vādin* keeps quiet, even when the members (*sabhyas*) are fully attentive and even when the *prativādin* questions him and if the *prativādin* being of a dull intelligence does not urge against him the *nigrahasthāna apratibhā*, no thesis is established and the debate ends there. And even if the *nigrahasthāna* is urged, the debate ends with that. Or the *vādin* may say something correct or incorrect, but the *prativādin* does not say anything and the *vādin* also not having the knowledge of *nigrahasthāna* does not charge the *prativādin* with *apratibhā*; then the debate has only one stage. Neither party can be said to have been victorious. A person may be arguing rightly but he cannot be said to be victorious till he has detected a *nigrahasthāna* in the opponent's position at the proper time; the *sabhyas* would not volunteer to expose this *nigrahasthāna* as they are there only to see the *vādin* proving victorious on the strength of his own intelligence. If at the outset the *vādin* puts forward his view wrongly and the *prativādin* rightly points out the defect in his argument and the *sabhyas* are satisfied with this, the *prativādin* is victorious; or if the rejoinder pointing out the defect is a wrong or futile one and the responsibility redounds on the *sabhyas*, the debate has two steps or stages. The debate can thus go on up to five stages if both the parties have the *pratibhā* to carry it on. A debate which commences with the logically valid setting forth of the proposition can continue up to six stages. In the first stage the thesis isset forth. In the second the *prativādin* launches an attack against the *vādin* by means of an answer that is subject to one of the four types of *niranuyojyānuyoga* (seizing the wrong moment for urging a *nigrahasthāna*, wrongly pointing out a *nigrahasthāna* where there is really not one, *chala*, *jāti*) and the like. The members not being active participants in the debate, though knowing everything, sit silently. At this stage (—the third—) the *vādin*, because the right rejoinder does not occur to him or with the mal-intention of making the *prativādin* stunned,

employs a futile rejoinder which is of the same type or of a different type but certainly a wrong one and the *prativādin* again gives a similar answer in the fourth stage. The *sabhyas* then wait for the president's intervention which would be opportune at the moment and which would silence both the *vādin* and the *prativādin*; but if he keeps quiet the *vādin* goes ahead to the fifth step or stage If the president happens to be a fool and does not know the procedure of the debate or is indifferent the debate enters upon the sixth stage, even though the *sabhyas* want it to end. Then at last the *sabhyas* in order that they may not be held guilty of not doing their duty announce that the debate is a *kukathā*, that is to say, a bad or a futile one and without taking any side, impartially check both the parties. In the absence of the *sabhyas*, or if they be not intelligent and practical (or if they be indifferent), chance alone could bring an end to the debate, which would then be like the fight of cats.[23] It can be seen that Veṅkaṭanātha's appraisal of the president, members etc., is realistic. Very often some king or rich man is made the president and he does not understand anything of what is going on.

Śaṅkara Miśra has given many practical suggestions for debaters in his *Vādivinoda*, for it is in debates that the arrogance of the opponent can be crushed. *Vādivinoda* is a very systematic and useful work on dialectic. In his *Vādopaniṣad-dvātriṁśikā* (27), Siddhasena rightly says that what counts or scores in a debate is composure rather than intelligence. A person may be highly learned but he will be a laughing stock among the people if he is not calm and does not show mental composure, whereas even a person who is not very learned may be able to create a favourable impression if he speaks calmly. Similarly, even a learned man will not shine in a debate if he does not know the secrets of debating (*Vādopaniṣad. 32*). In his *Vādadvātriṁśikā*, Siddhasena has given a fine description of the changed appearance of debaters in a debate, their concern only for victory and of how

disturbed the defeated person becomes and how puffed up the victor. He wonders why people cannot apply their minds to detachment and renunciation in the same degree in which they apply it to mastering the tricks and devices of debate. Siddhasena makes fun of disputants when he says that the mouth has been given by fate, and eloquence is one's own, and one always finds an audience, so what person who has overcome abashment could not become a *paṇḍita*? (*Daivākhātaṁ ca vadanam ātmāyattaṁ ca vāṅmayam. śrotāraḥ santi coktasya nirlajjaḥ ko na paṇḍitaḥ.—Nyāyadvātriṁśikā*, 7). Tact counts more than learning in a debate. The good-will of the judges and the president, retentive grasp and ability to confute or find fault, tolerance (not becoming excited), and outright boldness these are the six *vādacchalas* (secrets of debate).[24] The *Vāda* and *Yama Aṣṭakas* of Haribhadrasūri are highly illuminating and give a classification of debate into *śuṣkavāda, vivāda* and *dharma-vāda*, both victory and defeat being harmful in the case of the former two and beneficial in the last one. We may note by the way that Nīlakaṇṭha Dīkṣita, a nephew of Appayya Dīkṣita, has made fun of a *vādin* (disputant) besides others in his *Kaliviḍambana Śataka*. Here he gives, ironically of course, advice as to how a person can achieve victory. He has just to speak fearlessly and immediately; he need not hear or understand what the other party has to say. Not getting confused and upset, not becoming abashed, disdain of the opponent, smiling expression and praise of the king—these lead to victory in a debate. If the judge is not a learned man, one has only to speak in a loud voice to achieve victory; if he is learned, one should allege that he is partial to the other party. Gain is the probans, wealth the probandum, priest the example, one's elevation or well-being the conclusion—this is the mode of the syllogism. A seeker of knowledge does not obtain true knowledge for a very long time, but those desirous of victory have only to create a big noise to achieve victory.[25]

It may be noted that all these humorous and sarcastic

criticisms of debaters have in view the, what may be called, seasoned debaters, who, on the strength of the gift of the gab, can make much noise and convince the opponent and audience, and have an eye only on victory and consequent worldly gains. But there are debaters who speak out of true conviction and love for the understanding of truth and for the clarification of knotty problems of their branch of knowledge, though even here worldly gains may come in the wake of their victory, and may even serve as goading forces. If it were not so, dialectic would not have been given the status of a *vidyā*.

Patra—Jaina works, notably *Patraparīkṣā* of Vidyānanda and *Prāmeyakamalamārtaṇḍa* of Prabhācandra, (—Hemacandra introduced the topic in his *Pramāṇa–Mīmāṁsā*, but for some reason abruptly stopped there—) give us an exposition of *patra* or a written statement of the syllogism as a means by which a debate is at times conducted. At times when a disputant is in a fix and cannot understand what the opponent has to say, he charges the other party with changing the meaning of statements and demands a written statement of his argument to ensure certainty of meaning.[36] Similarly the one who started the debate may disown his question and say that the opponent is talking irrelevantly. Hence it is thought necessary to write down everything and a *lekhaka* (writer) acceptable to both the parties is specially appointed for the same. But *patra* specifically refers to an enigmatic or recondite statement on a piece of writing material hung or pasted on the walls of a temple or in a public place challenging anyone to explain it and enter into a debate on that subject. In ancient days, debates, poetical contests, etc. were often initiated thus by means of *patras*.

Patra is a *vākya* or written statement constituted of the well known members, which establishes the view acceptable to one, which is without any flaw and which consists mostly of words that are faultless and yet recondite. A statement which cannot establish what is to be proved or which is vitiated by

the use of corrupt words, or in which the expression is very clear cannot be regarded as a *patra* for in that case poems etc. would have to be termed '*patra*'. *Patra* should, moreover, in order to avoid this over-extension (*ativyāpti*) consist of the well known members of the syllogism (*pratijñā*, etc.). If a poem satisfies all these requirements it may well be called a *patra*.[27] Now, *vākya* (statement) signifies a collection of words that can be easily understood, whereas a *patra* (writing material) has the opposite character. How then can *patra* be defined as a *vākya* having the said characteristics? This usage is a secondary or a figurative one. A '*vākya*', primarily signifying a collection of words made of letters which can be heard, is put in script and this again on the *patra*, paper or writing material. Thus, script is identified with the writing material and the statement with script, and the statement comes to be termed '*patra*'. Or '*patra*' directly means a statement—that in which words are protected (*trāyante*), hidden, preserved from the opponents by the person desirous of victory.[28]

After a detailed exposition the Jaina logicians say that a *patra* can have only that meaning which is understood from the words and no *vādin* or *prativādin* or *prāśnika* (judge) can elicit any meaning he likes, for this would lead nowhere, and it would be impossible for one to know the meaning intended by another.[29]

It may be noted here that the Nyāya school insists that the arguments in a debate should always be in the form of a syllogism of five members (*avayavas*), but according to the Jaina logicians the debate can be conducted without the express use of the full syllogism, though the full argument would be implicit even here. The Naiyāyikas recognise five members of a syllogism, the Buddists two, but the Jaina logicians contend that there cannot be any such rigid rule. Two, three, five or even more members (*avayavas*) can be employed in a syllogism in accordance with the grasping power of the audience or the person to whom the point at issue is being explained. It may even rarely consist of only the *hetu* (reason), provided this is

immediately connected or linked with the question put by a student regarding the justification or proof of a particular proposition. What is simply essential is that the *hetu* (probans) should be determined as invariably concomitant with the probandum, or incompatible with the opposite for such a *hetu* alone can prove the *sādhya* (probandum), the members of the syllogism being extraneous conditions; and a *patra-vākya* can prove what is intended to be established without these[30] A *patra-vākya* thus consists of the statement of what is to be established and of the reason or probans. and not of the probans alone. For example : Everything is characterised by origination, destruction and duration, because it is knowable (*'Sarvam utpāda-vyaya-dhrauvya-yuktaṁ sat satsattvāt'* – *'Sad'* signifies *'pramā'*, knowledge, as all verbs denoting *'gati'*, motion, signify knowledge; that of which knowledge is present is *satsat* i.e. *prameya*, knowable; and nothing is known which is not characterised by *utpāda, vyaya, dhrauvya*). Such a *patra-vākya* is regarded as faultless.[31] *'Satsattvāt'* is used instead of *'prameyatvāt'* in virtue of the condition that a *patra* must consist of words that are recondite (*gūḍha*) and so should be a hard nut to crack for the opponent whose intelligence would thus be put to the test.

NOTES

1. See 'Buddhist Logic before Diṅnāga (Asaṅga. Vasubandhu, *Tarkaśāstras*)'— G. Tucci (*Journal of the Royal Asiatic Society*, July, 1922); *History of Indian Logic*, pp. 263-265—S. C. Vidyābhūṣaṇa; *Abhidharma Samuccaya*, pp. 104-106—Prahlad Pradhan, Viśva Bhārati Series, 1950.

2. See—Vādaḥ so'yaṁ jigīṣatoḥ.–*Nyāyaviniścaya*, II. 21?. also *Siddhiviniścaya*, V. 1. Also

Parārthādhigamas tatrānudbhavadrāgagocaraḥ.
jigīṣugocaraś ceti dvidhā śuddhadhiyo viduḥ. 2

satyavāgbhir vidhātavyaḥ prathamas tattvavedibhiḥ,
yathā kathaṁcid ity eṣa caturaṅgo na sammataḥ. 3.

jigīṣāvirahāt tasya tattvaṁ bodhayato janān,
na sabhyādipratīkṣā' sti yadi vāde kva sā bhavet. 25.
tato vādo jigīṣāyāṁ vādinoḥ sampravartate,
sabhyāpekṣaṇato jalpa-vitaṇḍāvad iti sphuṭam. 26.
tad apekṣā ca tatrāsti jayetaravidhānataḥ,
tadvad evānyathā tatra sā na syād aviśeṣataḥ. 27.
siddho jigīṣator vādaś caturaṅgas tathā sati,
svābhipretavyavasthānāl lokaprakhyātavādavat. 28.
—TŚlv., p. 277.

3. PM., *Vṛtti*, II 1. 30. See also TŚlv.. pp 279–280 (29-42).

4. Prajñā''jñaiśvarya-kṣamā mādhyasthya-sampannaḥ sabhāpatiḥ.
vādi-sabhyābhihitā vadhāraṇa-kalahavyapohādikaṁ cā'sya karma.
—PNTL., VIII. 20-21.

5. Vādi-prativādi-siddhāntatattvanadīṣṇatva-dhāraṇā-bāhuśrutya-pratibhā-kṣānti-mādhyasthyair ubhayābhimatāḥ sabhyāḥ vādi-prativādinor yathā-yogaṁ vādasthānaka-kathāviśeṣāṅgīkāraṇāgravādottaravādanirdeśaḥ, sādhaka-bādhakokti-guṇadoṣāvadhāraṇaṁ, yathāvasaraṁ tattva-prakāśanena kathā-viramaṇaṁ, yathāsaṁbhavaṁ sabhāyāṁ kathāphala-kathanaṁ caiṣāṁ karmāṇi.—PNTL., VIII, 18-19.

6. Pramāṇataḥ svapakṣasthāpana-pratipakṣapratikṣepāv anayoḥ karma.—PNTL., VIII, 17. This is a unitary function, hence the singular number in '*karma*'. See Ratnaprabhācārya's *Ratnākarāvatārikā* on the above.

7. Tatra tattvanirṇaya-vijayānyatarasvarūpayogyo nyāyānugatavacana-sandarbhaḥ kathā. laukika-vivāda vāraṇāya nyāyetyadi.—NSV 1.2.1,.p.65 (Ānandāśrama Series.

Kathādhikāriṇas tu tattvanirṇaya-vijayānyatarābhilāṣiṇaḥ sarva-janasiddhānubhavānapalāpinaḥ śravaṇādi-paṭavo'kalaha-kāriṇaḥ kathau-payika-vyāpārasamarthā iti.—*Ibid*.

8. Vādādhikāriṇas tu tattvabubhutsavaḥ prakṛtoktikāḥ avipralambhakāḥ yathākāla-sphūrtikāḥ anākṣepakā yuktisiddhapratyetāraḥ.—NSV, p. 67.

9. Tatra prathame prathama-tṛtīya-turīyāṇāṁ caturaṅga eva, anyatamasyā'-py aṅgasyā'pāye jaya-parājaya-vyavasthādidauḥsthyāpatteḥ. dvitīye tṛtīyasya kadācid dvyaṅgaḥ kadācit tryaṅgaḥ. tatraiva dvyaṅgas turīyasya, tṛtīye prathamādīnāṁ yathāyogaṁ pūrvavat, turīye prathamādīnām evam.
—PNTL VIII. 10-14.

10. See NP., pp. 169-173.

11. Atra ca'yaṁ kramaḥ—vādinā svapakṣasādhanaṁ prayujya na'yaṁ hetvābhāsas tallakṣaṇāyogād iti sāmānyato na'yam asiddha ityādi viśeṣato vā prativādinā svasyājñānādinirāsāya....—NSV, p. 69; also NP., pp. 173-174. Details regarding when and what *nigrahasthānas* can be urged can be gathered from the chapter on 'Checks in Debate'. See also VV, pp. 2-14.

12. Refer in this connection the remark of Maharṣi, a *sabhya* in the play *Mudritakumudacandra* of Yaśaścandra—Oh, Devasūri knows thoroughly well the rules of debate; were he to reproduce the sham refutation (*dūṣaṇābhāsa* or *jāti*), he himself would be charged with a *nigrahasthāna*. (*Aho Devasūrer vāda nyāyaveditvaṁ, yadi dūṣaṇ bhāsam ayam anūdya dūṣayet tadā'yam api nigṛhyeta.—Mudritakumudacandra*, p. 46—Jaina Yaśovijaya Grantha Mālā, 8.

13. VV., pp. 2-8.

14. Evaṁ sphūrtimator vādinor na kakṣāniyamaḥ iti vāda-kathā dinadvaye'-py anuvartate, yatra dvāv api vādinau sujñau kakṣāyāṁ tu yāvatā vādivacanabādho bhavati tāvad eva vaktavyaṁ na tu sphūrtimatābhya-dhikam, anyathā'nekābhidhāne sabalanam asamādheyaṁ syād ity avadheyam.—VV., p. 8.

15. See VV, pp. 12-13.

16. See VV. pp. 14-15.

17. Sajigīṣuke' smin yāvat sabhyāpekṣaṁ sphūrtau vaktavyam. ubhayos tattvanirṇinīṣutve yāvat tattva-nirṇayaṁ yāvatsphūrti ca vācyaṁ.—PNTL., VIII 22-23.

18. See *Ratnākarāvatārikā* on PNTL, VIII, 22.

19. Yadi punar vādī api jātivādinaṁ prati sādhanābhāsena pratyavatiṣṭhate tataḥ ṣaṭpakṣyāṁ satyāṁ na tattva-nirṇayāvasānā kathā bhaved iti śiṣyahitaḥ sūtrakāraḥ samādhanābhāsavādinaṁ prati ṣaṭpakṣīm avatārayati.—NVTT., p. 694.

Arthi-pratyarthinos tāvan na dvayor jaya-sambhavaḥ,
ekasya vijaye' pi syāt saphalā satkathaiva sā.
yatra dvayor na vijayo na vā tattva-viniścayaḥ,
kukathāṁ kathayanty enām asadukti-paramparām.—NP., pp 266-267.

20. Pratiṣedhe'pi samāno doṣaḥ. 39. Sarvatraivam. 40. (The same may be said by the *vādin* in answer to all *jātis*) (3rd step). pratiṣedha-viprati-

ṣedha-doṣavad doṣaḥ. 41. (4th step). pratiṣedhaṁ sadoṣam abhyupetya pratiṣedha-vipratiṣedhe samāno doṣa-prasaṅgo matānujñā. 42. (5th step). svapakṣalakṣaṇāpekṣopapattyupasaṁhāre hetu-nirdeśe parapakṣa-doṣābhyupagamāt samāno doṣaḥ. 43. (6th step).—NS. 5.1.39–43.

21. Iti ṣaṭpakṣyām ubhayor asiddhiḥ, kadā ṣaṭpakṣī, yadā pratiṣedhe'pi samāno doṣa ity evaṁ pravartate tadobhayoḥ pakṣayor asiddhiḥ, yadā tu kāryānyatve prayatnāhetutvam anupalabdhikāraṇopapatter ity anena tṛtīya-pakṣo yujyate tadā viśeṣa-hetu-vacanāt prayatnānantaram ātmalābhaḥ śabdasya nābhivyaktir iti siddhaḥ prathama-pakṣo na ṣaṭ-pakṣī pravartate iti.—NB. 5.1.43.

22. Vācyaṁ uttaram ato niravadyaṁ jātivādinam api prati taj-jñaiḥ, kaśmalottaragirā na tu kāryā pakṣaṣaṭka-parikalpana-goṣṭhī.
—NM, II, p. 190.

23. NP, pp. 267-269.

24. Prāśnikeśvarasaumukhyaṁ dhāraṇākṣepa-kauśalam, sahiṣṇutā paraṁ dhārṣṭyam iti vādacchalāni ṣaṭ.
Nyāyadvātriṁśikā, 31.

25. Na bhetavyaṁ na boddhavyaṁ na śrāvyaṁ vādino vacaḥ
jhaṭiti prativaktavyaṁ sabhāsu vijigīṣubhiḥ. 1.
asambhramo vilajjatvam avajñā prativādini,
hāso rājñaḥ stavaś ceti jayahetavaḥ. 2.
uccair udghoṣya jetavyaṁ madhyasthaś ced apaṇḍitaḥ,
paṇḍito yadi tatraiva pakṣapāto'dhiropyatām. 3.
lābho hetur dhanaṁ sādhyaṁ dṛṣṭāntas tu purohitaḥ,
ātmotkarṣo nigamanam anumāneṣv ayaṁ vidhiḥ. 4.
alabhyaṁ śāsyamānena tattvaṁ jijñāsunā ciram,
jigīṣūṇāṁ hriyaṁ tyaktvā kāryaḥ kolāhalo mahān. 5.
—*Kaliviḍambana-śataka*.

26. Compare 'Likhyatāṁ kaditre prayogaḥ'—(*Mudritakumudacandra*, p. 47). Kumudacandra asks Vādi Devasūri to write out his syllogistic argument on a piece of leather-paper.

27. Prasiddhāvayavaṁ vākyaṁ sveṣṭasyārthasya sādhakam,
sādhu-gūḍha-pada-prāyaṁ patram āhur anākulam. (p. 1)
na cāsādhupadaṁ vākyam praspaṣṭapadam eva vā,
sādhu-gūḍha-padaprāyam iti tasya viśeṣaṇāt.

padagūḍhādi kāvyaṁ ca naivaṁ patraṁ prasajyate,
prasiddhā'vayavatvena viśiṣṭasyā'bhidhānataḥ.

sveṣṭārthāsādhanasyā'pi naivaṁ patratvam āpatet,
sveṣṭārthasādhanasyaiva patratva-vacanād iha. (p. 2)

—*Patraparīkṣā*. See also PKM., p. 684.

28. Mukhyaṁ śabdātmakaṁ vākyaṁ lipyām aropyate janaiḥ,
patrasthatvāt tu tat patram upacāropacārataḥ.

trāyante vā padāny asmin parebhyo vijigīṣuṇā,
kutaścid iti patraṁ syāl loke śāstre ca rūḍhitaḥ.

—*Patraparīkṣā*. p. 2 (This second explanation is fanciful).
See also PKM., pp. 684 ff.

29. See PKM., pp. 689–692.

30. *Patraparīkṣā*, pp. 2–10. Vidyānanda quotes a number of stanzas of one Kumāranandin Bhaṭṭāraka, who even before Vidyānanda, must have written a work on the subject.

31. Tataḥ sarveṣāṁ vādināṁ avigānena siddhaṁ saṁkṣepataḥ sādhya-sādhana-nirdeśa-mātraṁ na punaḥ kevalaṁ hetuvacanaṁ viduṣāṁ api tadayogāt.—*Patraparīkṣā*, p. 4.

Satsat sad iti tadvat syāt patra-vākyam anākulam;
svasādhyārthāvinābhāvi-sādhanasyā' bhidhānataḥ. 23

utpādāditrayātmatvam antareṇa prameyatā,
na hi kvacit prasiddhā'sti pramāṇabalataḥ satām. 24
—*Ibid*, p. 5.

Sadanaṁ sad iti pramā yato'trābhipretā sarvair gatyarthatvāt gaty-arthasya ca jñānārthatvāt sarve gatyarthā jñānārthe vartante iti vacanāt sati vidyamānā sā yasmin tat satsat vidyamānapramaṁ prameyam iti yāvan na kasyacit pramāṇavādinaḥ prameyam aprasiddham.—*Ibid*, p. 5.

Part II

CHAPTER 10

VALID REASONING

Logic in India, as in Greece, developed out of the art of dialectic. Before Aristotle could work out his theory of Inference, there were the Sophists who had developed the art of dialectic in its various aspects. A similar historical phenomenon is seen in the development of the theory of Inference at the hands of the Indian logicians, Vedic, Buddhist or Jaina. We have studied in the previous chapters the various aspects of Indian dialectic. Implicit in all these was the theory of inference and various attempts were made to evolve theories of inference guided by the different metaphysical considerations of the different schoolmen. In fact, we may say that the theory of inference is only a culmination of the dialectical development, which in its later history utilises this theory and makes itself more systematic and scientific. It is not intended to suggest that inference was not known in the early stages or that right inference was not discriminated from a wrong one. As stated above, the list of *jātis* as given in different books of logic is representative of an attempt to condemn sophistical arguments which were ordinarily employed in debates and to detect their fallacy. Only, the principles behind correct or valid inference and the knack of detecting fallacies were not explicitly and specifically formulated in the early period of the history of Indian dialectic.

We shall in this chapter briefly trace the important developments in the theory of inference. From a very early period inference (*anumāna*) has been an accredited source of knowledge (*pramāṇa*) for the aquiring of knowledge of what cannot be perceived, on the basis of marks that can be perceived

or known and for the corroboration of scriptural assertions or for the generation of conviction regarding these The *Taittirīya Āraṇyaka* recognises *anumāna*, along with *smṛti* (memory), *pratyakṣa* (perception) and *aitihya* (testimony) as a means of attaining knowledge.[1] The *Maitrī Upaniṣad* 6.1, similarly recognises *anumāna* as a source of knowledge when it says that the movement of the inner self (*prāṇa*) is inferred from the movement of the outer self (*Āditya*) and vice versa.[2] *Pratyakṣa*, *anumāna* and *śabda* (variously termed as *śāstra*, etc.) are the accredited sources of knowledge from very early times.[3] The *Upaniṣads* have also considered the relative merits of *tarka* (ratiocination) and scriptural testimony or intuitive experience (cf. *Naiṣā tarkeṇa matir āpaneyā–Kaṭha Up.* 2.9). The *Mahābhārata* as said before, gives us evedence of some schools of logicians prevalent even before the *Nyāya-sūtra* was formulated, when it describes Nārada as skilled in Nyāya, able to distinguish between unity and plurality, conjunction and inherence priority and posteriority, and as deciding matters by means of proof, and as a judge of the merits and demerits of a five-membered proposition. *Ānvīkṣikī* (logical discipline) is recommended along with *trayī* (*Vedas*) and others as a subject of study for a king in the *Dharmasūtras* and Kauṭilya's *Arthaśāstra* (circa 400 B.C). In the *Rāmāyaṇa* (2.100.36), *ānvīkṣikī* is censured as inciting men not to follow the prescriptions of the *Dharmasūtras*, and the *Manusmṛti* (2.11) also complains of men who disregard the *Vedas* and the *Dharma-sūtras* on the strength of reasoning by logic (*hetu-śāstra*), though it is recommended in so far as it corroborates the teachings of the scriptures. It can be seen from this that from very early times man was applying his powers of reasoning, and ratiocination or cogitation (*manana*) is recommended along with *śravaṇa* (hearing and understanding) and *nididhyāsana* (contemplation) in the pursuit of higher truths.

In the Buddhist canonical literature, we have one *Anumāna sutta* in the *Majjhima Nikāya*. *Udāharaṇa* (example), *paṭiññā* (*pratijñā*), *upanayana*, *niggama*, *niggaha* (*nigraha*), *upamā*

(analogy) are mentioned in the *Kathāvatthu* and their application is systematic, though not specifically as technical terms of syllogistic analysis; they are used in connection with a stereotyped scheme of discussion. Milinda is said to be well-versed in logic (*Milinda-pañha* 1.9). In the *Anumāna-pañha* of the *Milinda-pañha* we have a number of inferences by which the existence of Buddha is proved; these inferences pertain to an entity of the past and can be said to be of the *śeṣavat* variety or even of the *sāmānyatodṛṣṭa* kind (as the relation of Buddha and his insignia or City of Righteousness, etc. has not been cognised (See Chapter I). In the *Lalitavistara* (Ch 1?, p. 1?) *hetu-vidyā* is mentioned along with Sāṁkhya-Yoga, etc. in all of which the Bodhisattva is said to have acquired distinction. The *Laṅkāvatāra-sūtra* mentions Naiyāyikas in Chaper II. Mahāmati asks Buddha, "Say, how in time to come Naiyāyikas will flourish ? How is *tarka* (reasoning) corrected and how is it carried on ? What is the nature of the doctrine that draws the conclusion from the reason and the example ?" In Chapter X we read, "Whatever is produced is destructible—this is the conclusion of the *Tārkikas*".[5]

In the Jaina *Āgama* literature we find '*hetu*' in the *Sthānāṅga Sūtra*, 338 in the sense of reason, source of valid knowledge and inference. When *hetu* is used in the sense of inference it is classified as follows :

(*i*) This is because that is (e.g. There is fire, because there is smoke); (*ii*) This is not because that is (e g. It is not cold, because there is fire), (*iii*) This is because that is not (e.g. It is cold here because there is no fire), (*iv*) This is not because that is not (e g. There is not smoke, because there is not fire)[6] Further in the *Sthānāṅga Sūtra*, 338 an example (*ṇāta*, *jñata*) is sub-divided as follows : (*a*) *āharaṇa*, a complete example which bears similarity to the thing exemplified in all respects, (b) *āharaṇa-addeśa*, a limited example bearing similarity to the thing exemplified in respect of only a certain aspect, (*c*) *āharaṇa-taddoṣa*, a defective example, (*iv*) *upanyāsopanaya* employing the argument of the

opponent so as to bring about his discomfiture.[7] We have a detailed and interesting exposition of the three-fold *anumāna* in the *Anuyogadvāra*, 144, a canonical work of the Śvetāmbara Jainas. *Anumāna* is divided into (a) *puvvava* (*pūrvavat*), (b) *sesava* (*śeṣavat*), (c) *diṭṭhasāhammava* (*dṛṣṭasādharmyavat*). This will be discussed later

The *Caraka Saṁhitā* defines *pratijñā* as the statement of what is to be proved and *sthāpanā* as its demonstration by means of *hetu*, *dṛṣṭānta* *upanaya* and *nigamana*. For instance,

1. *Nityaḥ puruṣaḥ* (Soul is eternal),
2. *Akṛtakatvāt* (because it is not a product),
3. *Yathā ākāśam* (like ether),
4. *Yathā cā'kṛtakam ākāśaṁ tac ca nityaṁ tathā puruṣaḥ* (and as ether not being a product is eternal, so is soul.)
5. *Tasmān nityaḥ* (therefore soul is eternal). (See *Vimāna-sthāna*, 8. 31).

In the *Sūtrasthāna*, 11 words of a trust-worthy person, perception, inference and cogitation (*yukti*) are mentioned as means of examination or investigation of reality and unreality, or truth and falsity. Inference is said to be three-fold, to be based on perception, and to pertain to things of all the three times. Fire is inferred from smoke, and sexual union from the observation of pregnancy; thus past things can be inferred. Observing a fruit to arise from a seed, people infer a future fruit from a seed (along with other auxiliary factors such as watering, etc.). *Yukti* is that cognition which observes or cognises things produced by an aggregate of causal factors; it also pertains to things of all the three times For instance, from the causal aggregate of water, ploughed earth, seed, season there is the production of corn; so there is the rise of the *garbha* (foetus) from the combination of the six *dhātus*; the full apparatus being present, fire is ignited; there being the complete aggregate of the four factors (viz physician, medicine, nurse, patient—see *Sūtrasthāna*, 9.3), disease is

dispelled.[8] *Yukti* seems to correspond to *tarka* of the *Nyāya-sūtra* and other works on logic. In the *Vimānasthāna* 8.40, *anumāna* is described as *tarka* helped by *yukti*, as for instance, when fire is inferred from the power to digest, strength from energy to do exercise, organ of hearing, etc. from the cognition of sound, etc.[9]

The *Caraka-saṁhitā* (*Sūtrasthāna*, 11.31-32) gives the illustration of the examination of the problem of rebirth by means of *āptopadeśa*, *pratyakṣa*, *anumāna* and *yukti*. One sees that children of the same parents are unlike each other in respect of complexion, figure, temperament, etc. and a newly born child without being taught knows how to smile, suck the mother's breast and so on. From this one infers that what one does cannot be exhausted unless it has yielded its fruit; the action of a previous life passes on to the next life and is termed '*daiva*' (destiny); the difference of complexion, etc. is on account of the *karman* (action) of a previous life; what one does in this life will yield its fruit in a future life; the seed is inferred from the fruit and the fruit from the seed. Thus, from the experiences of the present life one can infer the *karman* of a past life, and from the *karman* of this life one can infer what sort of experiences one would have in a future life.

In the inferences—generally pertaining to causation—seen above, there is mostly an attempt to prove something on the basis of analogy or on the strength of sameness with past experience. There is acquaintance with the members of the syllogism in many cases. But we do not find any clear formulation of the theory of inference or that of *vyāpti* though the concept of *vyāpti* is certainly implicit. The essential problem in forming a theory of inference is to discover a sound basis for it. All the schools of Indian logic have found such a basis in their concept of *vyāpti* (invariable concomitance between the middle term and the major term). The *vyāpti* (rule of invariable concomitance) aims at giving a relation of invariable

concomitance between two terms, one of which can become the *hetu* (reason, middle term) and the other the *sādhya* (probandum, major term). It may be noted here that it is a characteristic of the Indian syllogism that it is an inductive-deductive syllogism. It never draws a conclusion without bearing in mind the inductive validity of *vyāpti* and it is in order to verify this that the *vyāpti* has always to be *sodāharaṇa*, accompanied by an illustration. One cannot agree with Keith and others when they say that in the original process the reason proved what was to be established merely on the basis of similarity or dissimilarity of the subject (minor term) with the example [10]. Some *vyāpti* was always in the mind of the person arguing whether he actually expressed it or not, as can be seen from the *jātis* and the answers given to them in books on logic of all the schools, though no theory of *vyāpti* might have been explicitly fomulated and it might have rested on repeated observation of the association of two things connected somehow at different places and times.

Definition of Inference

Let us now see how the different schools of logic have worked out their theories of *vyāpti* and the consequential theories of inference. The earliest explicit formulation of inference which has survived is probably that contained in the *Vaiśeṣika-sūtra*. Inference is there defined as 'knowledge from a mark or sign' (*laiṅgikam jñānam*).[11] This mark of inference or probans is of two kinds—*dṛṣṭa* (seen) and *adṛṣṭa* (not-seen) or *sāmānyato-dṛṣṭa* (seen from likeness). The *liṅga* functions on the strength of certain relations in which things stand to each other. These relations are enumerated in the *Vaiśeṣika-sūtra* 9.2.1 : the *liṅga* (probans, middle term) can be (*a*) effect of, (*b*) cause of, (*c*) conjoined with, (*d*) opposed to, (*e*) inherent in, the *sādhya* (probandum, major term) (*asyedaṁ kāryaṁ kāraṇaṁ saṁyogi virodhi samavāyi ceti laiṅgikam*). The *Vaiśeṣika-sūtra* (3.1.9–13) says that the reason or middle term (*liṅga*) may be a thing conjoined with, or

inherent in the major term (*sādhya*) or inherent along with the major term in one thing or opposed to the major term (*saṁyogi samavāyi ekārtha-samavāyi virodhi ca*—VS. 3.1.9.). For instance, (as Candrānanda says) smoke is conjoined with fire (the probandum), horn is inherent in cow. Inference of touch from colour is an instance of inherence in one thing. The middle term can be opposed to the major in four ways: (*a*) The absence of the probans is the mark of the presence of the probandum to which it is opposed; as for instance, that it has not rained is a sign that clouds have been tossed away by the wind; (*b*) the presence of the probans is the mark of the absence of the probandum; that it has rained is a sign that clouds have not been tossed by the wind; (*c*) the absence of the probans is the mark of the absence of the probandum; that a thing has not assumed blackness is a sign that it has not come into contact with fire; (*d*) the presence of the probans is a mark of the presence of the probandum; ruffled snake is the sign of the presence of an ichneumon.[12]

Dṛṣṭa and Sāmānyato-dṛṣṭa

Two kinds of inferences based on real relations are recognised according as the *liṅga* is seen (*dṛṣṭa*), or is not-seen or is seen from likeness (*adṛṣṭa* or *sāmānyato-dṛṣṭa*) (See VS., II. 1.8,10, 15–16; III. 2. 6–7). Inference of fire from smoke is of the former type; and arguments proving the existence of soul as the substrate of psychical qualities, and the existence of wind as the substrate of hot–cold touch are of the latter type. These are two of the nine substances (*dravya*) recognised by the Vaiśeṣika system; they are both imperceptible but their attributes are perceptible; their existence has to be established by an inference. But obviously this will not be an inference of the ordinary kind which establishes a thing not perceived then, but capable of being perceived; hence there is the necessity of admitting a special type of inference for the knowledge of things which are empirically imperceptible.

The *Vaiśeṣika-sūtra* notes as a peculiarity of the *sāmānyato-*

dṛṣṭa type that it does not lead to a definite or specific conclusion (*sāmānyato-dṛṣṭāc cā'viśeṣaḥ* –VS.,II. 1.16; III.2.7)[13]. This is perhaps partly the reason for the name given to it. From psychical qualities we can infer the existence of a substrate, and we can adduce scriptural or verbal authority for saying that the 'soul' is this substrate; but the inference itself tells us nothing as to the precise nature of the substrate which as thus inferred remains indeterminate. (The *Nyāya-sūtra*, therefore argues from the specific nature of psychical qualities to a specific substrate, soul. See NS., III. 2.58ff).

Praśastapāda tries to explain the difference of the two kinds of inference as follows: The *dṛṣṭa anumāna* is that where the *prasiddha*, (the well-known, that is to say the illustration) and the *sādhya* (i.e, the subject about which something is to be proved) belong to just the same class. As for instance, when one has seen the dewlap only in the body of the cow, whenever on a subsequent occasion one happens to see the dewlap, one infers the existence of the cow. When, however, the *prasiddha* and the *sādhya* belong to two different classes, the inference follows only from the concomitance of the generic form of the *liṅga* (probans) with the generic form of the *anumeya* (probandum), and this inference is said to be of the *sāmānyato-dṛṣṭa* type. For instance, having found the activity of such persons as the farmer, the trader and the servants of the king always yielding certain results we infer the fact that even in the case of persons observing the rites of their respective castes and stages of life, the activity, which is not found to have reference to any visible purpose, must tend to certain results.[14] Here the concomitance between success and activity in their generic forms is assumed,—of course, there being no obstructive forces. In this *sāmānyatodṛṣṭa anumāna*, we argue from one sort of activity, the fruit of which we have experienced to another sort of activity, of the fruit of which we have no experience; that is to say, we extend the connection between activity and fruit which has been experienced in one class of activity to

other sorts of activities in which such connection has not been experienced. In the *dṛṣṭa anumāna* on the other hand, we argue from one cow to another cow, that is to say from one thing to another thing of exactly the same sort.

Śabara (300 A.D.) also in his *Bhāṣya* on the *Pūrva-mīmāṁsā-sūtra* (I.1.4) recognises two kinds of inferences—that in which the relation has been experienced in perception (*pratyakṣato-dṛṣṭa-sambandha*) and that in which it is experienced from likeness (*sāmānya-dṛṣṭa-sambandha*). Śabara gives the inference from smoke to fire as an example of the former; and as an example of the latter the inference that the sun moves from the fact that it changes its place on the basis of the experience that change of place is invariably preceded by movement (*Devadattasya gatipūrvikāṁ deśāntara-prāptim upalabhya*). Vātsyāyana gives the same illustration of *sāmānyato-dṛṣṭa anumāna*, the point being that the movement of heavenly bodies is something beyond our direct experience. Similarly, Vyāsa (4th cent. A.D.), in his commentary on *Yoga-sūtra* I. 7 (—though the two kinds of inferences are not there distinguished—), and Gauḍapāda in his commentary on the *Sāṁkhya Kārikā*, 5, have given the same illustration of *sāmānyato-dṛṣṭa anumāna*. Gauḍapāda has given another instance also : Seeing mango trees flowering in one place a person infers that mango trees must have flowered elsewhere also. But the original application of this type of inference seems to have been to something which transcends empirical experience in a completer sense than this and the *Sāṁkhya Kārikā*, 6 seems to be nearer to the original conception when it says that knowledge of things beyond the senses comes from *sāmānyato-dṛṣṭa anumāna* (*Sāmānyatas tu dṛṣṭād atīndriyaṇāṁ pratītir anumānāt.*); and Gauḍapāda gives the right illustration when he says that the existence of *prakṛti* and *puruṣa* is thus inferred. This distinction takes the force out of Kumārila's objection that the division of inference into these two kinds is not proper because the connection between reaching a place and movement is seen by perception, no less

than the connection between smoke and fire; of course, there is no perception of this connection in the sun, but neither is there perception of the connection between smoke and fire on the hill (See Ślv., *Anumāna*, 138 ff).

The distinction between *dṛṣṭa* and *sāmānyato-dṛṣṭa anumāna* as thus understood is preserved in one of the alternative explanations given by Vātsyāyana of the term '*sāmānyato-dṛṣṭa*' in the *Nyāya-sūtra* 1.1.5, though it remains doubtful whether this was the real meaning of the *sūtra*. The *sāmānyato-dṛṣṭa anumāna* is that where the relation between the *liṅga* (mark) and the subject not being perceived the existence of an unperceived subject is inferred from the likeness of the *liṅga* to something; as for example, the existence of the soul is inferred from desire and the like or from their community of nature with something else. Desire, etc. are qualities—there is no doubt about it—but they are of so unique a kind that, to use Praśastapāda's expression, there is complete difference of kind (*atyantajātibheda*) between them and those physical qualities on the relation of which to physical substance the inference rests. Desire and the like are qualities, and qualities reside in substances; that which is the substrate of these qualities—desire, etc.—is the soul. The alternative illustration given by Vātsyāyana of *sāmānyato-dṛṣṭa* is the inference of the movement of the sun from its change of place on the ground that change of place is invariably connected with movement. Uddyotakara rejects this illustration saying that he does not understand it. There is no inferential mark (*liṅga*) that has ever been perceived as concomitant with either the sun or its motion, all cases of the concomitance of change of place with motion being observed elsewhere than in the case of the sun; and it is not possible to infer a thing that has never been found to be necessarily related, otherwise anything could be inferred from anything else. Uddyotakara has pointed out that change of the sun's position also is not perceived; no one sees the sun going from one place to another, as the 'other place' to which the sun goes

must be either the *ākāśa* or some point in space and both of these—*ākāśa* and point in space—are imperceptible. The only thing that we see is the solar disc, and it is not right to draw an inference merely from the perception of a thing by itself. Moreover, the conjunction of two things—sun and point in space—one of which is perceptible and the other imperceptible, cannot be perceived, and the Sun's going from one point to another is nothing more than its conjunction with a point in space.[15]

According to Uddyotakara, the *sāmānyato-dṛṣṭa* is that in which an object is cognised as qualified by a character which is an invariable concomitant of a well known character of that object, the relation between them being other than causality. For instance, the presence of water is inferred from the presence of cranes. Here we take as the subject (*pakṣa*) the tree and the other things along with the spot which is well known as constantly inhabited by cranes and with regard to the spot we infer the presence of water. It may be noted that the one and the same object as qualified by the well-known character becomes in this case the instrument of inference and as qualified by the other character becomes the object of inference. The spot known as having cranes is the means of the inference of the spot as having water. The principal point of difference between this and the other two kinds of inferences is that in this case the relation of cause and effect does not enter at all. Vācaspati says that the inference of the movement of the sun from change of place is based on causality as movement is the cause of change of place, and so would be an instance of *śeṣavat anumāna*; this is one of the reasons why Uddyotakara gives another interpretation.[16]

In can be seen that as compared to the *dṛṣṭa anumāna* which adheres rigidly to the experience achieved, the *sāmānyato-dṛṣṭa* works through analogy also. As Randle says, the *sāmānyoto-dṛṣṭa* inference is " much more constructive or productive, much less purely reproductive or repetitive, than

the *dṛṣṭa* inference. The former is an inference to the relatively novel, while the latter deals merely with repetitions of the old. The *sāmānyato-dṛṣṭa* looks less cogent in form, but is more like real and valuable inference in fact " (*Indian Logic in the Early Schools*, p. 159) We might say that the *sāmānyato-dṛṣṭa* inference would be of great help to practical researchers—scientists and others treading untrodden land.

Nyāya definition of Inference—

Pūrvavat, Śeṣavat, Sāmānyato-dṛṣṭa :

The *Nyāya-sūtra* 1.1.5 defines Inference (*anumāna*) as 'that which is preceded by perception' and gives a three-fold classification of it—*pūrvavat, śeṣavat* and *sāmānyato-dṛṣṭa*—as against the two-fold classification of the *Vaiśeṣika-sūtra* (*Athā tat-pūrvakaṁ trividham anumānaṁ pūrvavac cheṣavat sāmānyato - dṛṣṭaṁ ca.* — NS., 1.1.5). Vātsyāyana himself seems to be uncertain about the interpretation of these and gives alternative explanations of them. Randle has tried to reconstruct the Sūtrakāra's view regarding these.[17] The *sāmānyato-dṛṣṭa* meant to the author of the *Nyāya-sūtra* just what it meant to that of the *Vaiśeṣika sūtra* and he subdivided *dṛṣṭa-liṅga* into *pūrvavat* and *śeṣavat*. As there are references to inference by elimination in the *Nyāya-sūtra* itself, it is possible that *śeṣavat* had this meaning for the author of the *Nyāya-sūtra*, especially because it is one of the alternative explanations given by Vātsyāyana (cf. *Pariśeṣād yathoktahetūpapatteś ca*—NS, 3.2.39). Desire, etc. cannot belong to the five material elements nor to the mind; there is no other substance except *ātman*, soul; therefore, they must belong to the soul. Vātsyāyana explains and illustrates *śeṣavat* as follows: The word '*śeṣavat*' means remainder; hence the *śeṣavat* inference is that in which with regard to a thing some of the likely properties being denied and eliminated, and this elimination not applying to other likely properties, we have the cognition of those that remain (thus undenied).

For instance, with regard to *śabda* (sound), we find that it is an entity and is impermanent, and as these two characters (being an entity and being impermanent) are found to be common to substances, qualities and actions only, their presence in sound distinguishes it from the remaining categories, viz. *sāmānya* (generality), *viśeṣa* (particularity) and *samavāya* (inherence), which are entities, but are eternal. When there arises a doubt whether sound is a substance, a quality or an action, we reason by a process of elimination thus : (*a*) Sound cannot be a substance, because it inheres in a single substance, *ākāśa* (—substances, it may be noted, are either not inherent in any substance, e.g. atom, or are inherent in more than one substance, e.g. *dvyaṇuka*, *tryaṇuka*, etc.); (*b*) sound is not an action, because it is the originator of another sound (a thing of its own kind, whereas action always brings about effects entirely unlike itself,—action in most cases produces some kind of conjunction or disjunction). And by this eliminative reasoning we conclude that sound must be a quality. This example of *śeṣavat* inference is not acceptable to Vācaspati. According to him, *pariśeṣa* is only another name for the purely negative inference (*vyatirekin*), while the example cited by the *Bhāṣya* is one of the affirmative-negative (*anvaya-vyatirekin*) kind. The example cited by Vācaspati is the inference of the fact of desire, etc. being dependent upon the self.[18]

Pūrvavat inference is, according to Vātsyāyana, that where of two perceptible objects such as we have before experienced, the sight of one leads to the inference of the other which is not perceived, as when fire is inferred through smoke (*yathā pūrvaṁ pratyakṣabhūtayor anyatara-darśanenā'nyatarasyā'-pratyakṣasyā'numānaṁ, yathā dhūmenāgniḥ.*—NB., 1.1.5). That is to say, *pūrvavat* inference comprises ordinarily inferences of every kind, excepting the *śeṣavat* (eliminative) inferences, which the author of the *Nyāya-sūtra* seems to have treated as a class apart, thereby innovating on the *Vaiśeṣika sūtra*,

which either did not note them (*śeṣavat*) or did not regard them as embodying any distinct principle. The Naiyāyika himself has disregarded the *śeṣavat* variety for all practical purposes. It seems that *śeṣavat* inference interpreted as eliminative inference is an originality of Vātsyāyana's—a subtlety introduced by him which did not find favour with others and was consequently abandoned. *Śeṣavat* would rather have meant to the author of the *Nyāya-sūtra* inference from effect to cause or from part to whole. The example of *sāmānyato-dṛṣṭa* given here by Vātsyāyana is the inference of soul as the substrate of qualities like desire, etc.

The alternative explanations which Vātsyāyana gives of the three terms are that *pūrvavat* is inference from what precedes, that is say, from cause to effect; for instance, from clouds we infer that there will be rain. *Śeṣavat* is inference from what follows,—the inference that it has rained in the upper region of the river from the spate in the river. The inference that the sun moves, though we have never seen it moving, on the ground that when we see something in one place which we saw previously in another place there is always movement preceding it, is an instance of *sāmānyato-dṛṣṭa.*

A. B. Dhruva is of the opinion that Vātsyāyana when he says that *pūrvavat* and *śeṣavat* may mean, respectively, inference from cause and inference from effect, is doubtless in possession of the real meanings of the terms as used in the *Sūtra*; but he does not seem to know that they were borrowed from the vocabulary of Mīmāṁsā, in which the words *pūrva* and *śeṣa* are of frequent occurrence. It was the Mīmāṁsakas who were the 'older Naiyāyikas'. That Nyāya was a synonym of Mīmāṁsā was known even to such latter-day writers of Mīmāṁsā as Mādhava and Pārthasārathi Miśra who called their works *Nyāyamālāvistara* and *Nyāyaratnākara.*[19]

It might also have been originally intended that *pūrvavat* is inference as to things future, *śeṣavat* as to things past and *sāmānyato-dṛṣṭa* as to things present. Does Vātsyāyana mean

this when he says that as contrasted with perception, inference pertains to things past, present and future, though he has not specifically restricted any variety to any of the three times in particular ?[20]

We have a very detailed and interesting exposition of the three-fold inference in the *Anuyogadvāra*, 144, a canonical work of the Śvetāmbara Jainas. Here *anumāna* is divided into (A) *puvvava*, (B) *sesava*, and (C) *diṭṭha-sāhammava*—the same types as those mentioned in the *Nyāya-sūtra*.

(A) *Puvvava*, as before, that is to say, inference from marks formerly observed. Thus, a mother recognises her child from such physical marks as she has observed before, e.g. mole or scar. The illustration in the text is supported by a quotation[21], which shows that there had been earlier writers, probably Jainas, who had dealt with the subject.

(B) *Sesava*, inference from the other, that is to say, of one number of a pair of correlates from the other. This is of five kinds : (i) *kajjeṇaṁ* (*kāryeṇa*), inference of a cause from its effect. Thus we infer a conch from the sound of its blowing, a drum from its beating, a bull from bellowing, a peacock from its peculiar note, and so on; (ii) *kāraṇeṇaṁ*, inference of an effect from its cause. For example, threads are a cause of a piece of cloth and not vice versa, grass fibres are a cause of mat and not vice versa; a lump of clay is a cause of a jar and not vice versa. The commentator to clarify the obscurity in these examples, adds others : from a particular appearance of the clouds, one infers a sure rainfall; from the rise of the moon, its necessary effect, viz. a tide in the sea; from the rise of the sun, its necessary effect, viz. blooming of day-lotuses, and so on. That is to say, given the full complement of causal factors, the effect must follow. (iii) *guṇeṇaṁ*, inference of a substance from its attribute. Thus we infer a flower from its smell, salt from its taste, and so on; (iv) *avayaveṇaṁ*, inference of the whole from its part. Thus we infer a buffalo from its horn, a cock from

its crest, an elephant from the trunk and so on; (v) *āsaeṇaṁ* (=*āśritena* ? the commentator explains: *āśrayatīty āśrayaḥ, tena*). Inference of the abode from that which abides therein; for example of fire from smoke, or of water from cranes, a shower of rain from turbid waters, and so on.[22]

(C) *Diṭṭha-sāhammava*—inference from similarity. This is of two kinds-(i) *sāmannadiṭṭham*, inference from that which is observed as a point in common to all the individuals of a group; e.g. as one man, so many; as many, so one; (ii) *visesadiṭṭham*, inference from that which is observed as a distinguishing trait of a certain individual amidst a group; as for instance, when one recognises a friend from among a number of men in the crowd. *Anumāna* is further divided according as it refers to things of the past, present or future, and these divisions are illustrated at great length.

The Buddhist work *Upāyahṛdaya* equates *pūrvavat* with recognition on the strength of some distinguishing mark, as when one recognises a well-known man in his old age from the remembrance of his sixth finger which he was seen to possess as a child having a head with a pustule. *Śeṣavat* is inference from some perceived parts to the rest; as for example, when we infer that the sea is briny since a drop of sea-water tastes saltish. *Sāmānyato-dṛṣṭa* is inference from analogy; as for example the inference of the motion of the sun and the moon.[23]

Gauḍapāda in his commentary on the *Sāṁkhya-kārikā*, 5, explains *pūrvavat* as inference based on prior perception, from cause to effect; as for example, from rain clouds to rain. He gives the same illustrations as in the *Upāyahṛdaya* for the other two varieties.

Uddyotakara among others gives other interpretations of the 'three-fold' inference- (A) 'Three-fold' may also refer to the fact of the inferential mark or probans being well-

known (*prasiddha*), true (*sat*) and certain (*asandigdha*),—the well-known probans being that which is existent in the subject, the true that which subsists in other things of the same kind, and the certain that which is never found apart from things of the same kind. This is meant to exclude the fallacious probans. (B) Or 'three–fold' may signify : (a) universal affirmative (*anvayin*), (b) universal negative (*vyatirekin*) and (c) universal affirmative--negative (*anvaya–vyatirekin*). Of these the last (*anvaya-vyatirekin*) is that in which the probans while subsisting in the subject (*pakṣa*) and other things akin to it in which the probandum is known to reside (*sapakṣa*), does not subsist in dissimilar objects, where the probandum is known not to reside (*vipakṣa*), thus fulfilling the conditions of a valid probans—*pakṣe sattva* (presence in the subject), *sapakṣe sattva* (presence in homologues) and *vipakṣād vyāvṛtti* (absence in heterologues). For instance, word (*śabda*) is impermanent, because while possessing generality (*sāmānya*) and particularity (*viśeṣa*), it is perceived by the external sense-organs of ordinary human beings like us, like jar and unlike *ākāśa*. The universal affirmative (*anvayin*) is that in which the probans subsists in the subject and other things akin to it (*sapakṣa*) and is so universal that there is no heterologue (*vipakṣa*) in which the probandum is known to be absent; as for example, the Buddhist argument : 'Word is impermanent because it is a product' (—The Buddhists hold that everything is impermanent). A Nyāya example would be : ' Particularity (*viśeṣa*) is something that can be spoken of, because it is knowable, like the generality of things'. The universal negative (*vyatirekin*) is that in which the probans subsists in the subject, in whose case there is nothing apart from the subject in which the probandum is known to be present and which does not subsist in anything where the probandum is known to be absent; that is to say, there is in this case no *sapakṣa* and the probans does not subsist in the *vipakṣas*. For example, ' The living body is not soul–less; as if it were soul–less it would be without vital functions.'[24]

Vācaspati has, in his commentary on the *Sāṁkhya Kārikā*, 5, reduced the three varieties of inference to two—*vīta* (direct) comprises *pūrvavat* and *sāmānyato-dṛṣṭa*; and *avīta* (indirect), *śeṣavat*. The latter is a means of proof by elimination and is used to establish, for example, the Sāṁkhya doctrine of the latent existence of the effect in the cause. Clay and jar are one, because neither the relation of union nor of separation is possible between them; if they were different, then they would be either in a relation of union like jar and its contents, or in a relation of separation, like two mountains; neither of these is found here, therefore clay and jar are one. *Avīta* corresponds to Uddyotakara's negative (*vyatirekin*) argument (See NV., p. 123) which for him is an indirect form of argument from the undesirable consequences (*prasaṅga*) of the opposite. *Vīta* is explained by Vācaspati as that which goes or reaches in different ways, in that while subsisting in the *pakṣa* it may or may not subsist in the *sapakṣa*; the *avīta* on the other hand is found only in the *pakṣa* and does not go away to the *sapakṣas*.[25]

It is obvious that these are later subtleties and refining touches for which perhaps Uddyotakara can claim originality. There is no evidence that Vātsyāyana or Praśastapāda or Diṅnāga had raised the question whether a probans could be valid if it satisfied only two conditions of the three mentioned above (*pakṣe sattva, sapakṣe sattva, vipakṣād vyāvṛtti*)—the *kevala-vyatirekin* and the *kevalānvayin* of the later Naiyāyikas.

If we consider the conception of inference up to the time of even Praśastapāda, it can be seen that inference means the cognition of an unseen object through certain data a person has regarding another thing on the strength of the relation of invariable concomitance known to subsist between the two. What this relation should be is not specifically determined, though usually the two terms are related as cause-effect. The repeated observation of two things together or the repeated observation of the absence of one on there being the absence of another, or repeated observation of the

relation of succession between two things or uncontradicted observation of conventional signs or symbols (e.g. staff of a mendicant) are guiding factors in determining the relation of concomitance. The cause is inferred from the effect and the effect from the cause, the nature of the whole from that of the part; and even mere analogy is helpful in the case of utterly imperceptible things. Similarly regular association and succession also serve as props of inference. In short, uniformity of nature and the uniformity of conventional practice and behaviour were the mainstays of inference till the time of Praśastapāda.

Gradually the problem comes to be raised and faced that the cause may be present and yet the effect may not follow if the auxiliary conditions are not present or if there is any obstructive factor, so the effect cannot be inferred from the cause; or since an effect may have a plurality of alternative causes, the cause cannot be inferred from the effect. We find an attempt at such a critical examination in the *Nyāya-sūtra* itself (2.1.37ff). If may be objected that inference cannot be an instrument of valid cognition as in the particular instances cited of the three kinds of inference, the premisses are not true in view of obstruction, demolition and resemblance. The inference of it having rained in the upper region from the perception of the river to be full is cited as an instance of a correct inference. Now as a matter of fact, the river may be seen to be full also by reason of its course being blocked by a dam; hence from the mere perception of the fullness of the river to conclude that it has rained in the upper regions of the river cannot be correct inference.

Similarly, the inference 'It is going to rain' from perceiving the ants running away with their eggs is regarded as an instance of a correct inference. But the running about of the ants with their eggs can be due to the demolition of their nests, so it is not correct to infer on seeing the ants running about with their eggs that it is going to rain. The presence

of the peacock or the coming of rain is also inferred from hearing the peacock's note or scream. But a man may, as a matter of fact, be mimicking the peacock, so the inference cannot be a correct one (*rodhopaghāta-sādṛśyebhyo vyabhicārād anumānam apramāṇam.*—NS., 2.1.37). The logician's reply is that this is not true, because the reasons in the three inferences cited above are entirely different from (*a*) such rise of water as is restricted to one place, (*b*) such running about of ants with their eggs as is due to fright, and (*c*) such peacock's note as is a mere imitation (*na, ekadeśa-trāsa-sādṛśyebhyo'rthāntarabhāvāt.*-NS., 2.1.38). What can rightly be regarded as a probans of an inference, says Vātsyāyana is not anything in its unqualified form (*nā'viśiṣṭo liṅgaṁ bhavitum arhati.*—NB., 2.1.38). For example, in the above-mentioned cases, (*a*) when one infers that it has rained in the upper region of the river, from the fact that the river is full, he does so not by seeing a rise in the river, but by seeing that the water previously existing in the river has become augmented by rain-water, that the velocity of the stream has increased and that the stream is carrying along in its course flakes of foam, fruits, leaves and logs of wood. All these additional factors are not present when the rise is due to some obstruction placed in the course of the stream. (*b*) When a person infers coming rain he does so from the fact that whole hosts of ants are running about calmly with their eggs and not only that a few ants are running distractedly. Vācaspati has given a fine exposition of *pūrvavat* inference which consists in the inferring of the effect from the perception of its cause. The running about of the ants with the eggs cannot be regarded as the cause of rain for the simple reason that there can be rain even without the running about of the ants. The fact, however, which makes the ants' running about an indication of coming rain is this that what brings rain is some sort of commotion in the elements, e.g. the rising of heat-waves below the earth's surface. But before this commotion brings rain it produces certain other phenomena also, one such being

the running about of the ants with their eggs; so that the appearance of the running about of the ants leads to the inference of the elemental commotion which is the cause of rain, and from this we go on to infer that it is going to rain. In this manner alone can we regard the instance as one of *pūrvavat*. But it is quite possible that a man may infer the coming of rain without knowing the relation of causality thus subsisting between them; in which case it would be an instance of *sāmānyato-dṛṣṭa* inference (like the inference of the presence of water from the presence of cranes) (See NVTT., pp. 402-403). (*c*) The third inference is wrong only when the note is in reality not that of a peacock but is some other sound resembling it and the person fails to perceive this fact. But when he hears a particular kind of sound in the *ṣaḍja* tone in which the peacock's scream is always pitched, he realises that what he hears can emanate only from the peacock; thus, what leads to the right inference of the peacock's presence (or coming rain) is that particular kind of sound (—Such infallible inference of the peacock's presence from its note is drawn unmistakably by serpents). Thus it is clear that when a person tries to infer from the perception of an unqualified thing something that can be inferred from the perception of a particular qualified thing, the fault lies with the person who infers and not with inference. Inferential cognition can thus be doubtful or incorrect only if the datum is insufficient or the probans is wrongly perceived.

If we accept the rule that a text is best explained by itself we may consider that *Nyāya-sūtra* 2.1.37-38 gives instances of inferences corresponding to the three types enumerated in 1.1.5. If this is so, the illustrations which Vātsyāyana reads in these *sūtras* do not agree with those he has given in his commentary on 1.1.5.

Can it be said that *pūrvavat* originally signified inference about things of the past, *śeṣavat* about things of the future and *sāmānyato-dṛṣṭa* about present things?[26]

Other Definitions

Coming back to the definition of inference in the different schools, the *Sāṁkhya-kārikā, 5* defines it as cognition based on the knowledge of the co-existence of the mark (*liṅga*) and the possessor of the mark (*tal liṅga-liṅgi-pūrvakam*); —as when, according to Gauḍapāda, from the perception of the staff we infer that the possessor of the staff is an ascetic; and from the sight of the ascetic we infer that the peculiar staff belongs to him or that it is a symbol of the order of ascetics.[27]

The Buddhist logician Vasubandhu defines *anumāna* (means of inferential cognition) as the knowledge of an object inseparably connected with another object by a person who knows about it. Vasubandhu lays stress on the inseparable connection which unites the probans and the probandum (*anantartarīyakārtha–darśanaṁ tadvido'numānam*–Vasubandhu's definition in the *Vādavidhi* quoted in the *Nyāya–Vārttika*, p. 54). The definition can also mean -'Experience of a thing as inseparably connected is the instrument of inference for a person who knows this inseparable connection'. Diṅnāga criticises this and other definitions including the Nyāya one on the ground that a connection is never cognised through the senses. (*sambandho nendriyagrāhyaḥ—Pramāṇa-samuccaya*—2.28).[28] According to him, inference is cognition of an object through its mark (*Pramāṇa–samuccaya* 2.1). Diṅnāga objects to the stand of the Naiyāyikās that the effect or the result can be inferred from the cause, as some impediment might be present to hinder its production (2.30). He also objects to the theory of the Sāṁkhyas when they establish the relation of mutual destruction (*ghātya–ghātakabhāva*) which allows us to infer the absence of snakes in a place where the ichneumons are abundant. The snake may be a victor in the struggle with the ichneumon and then the inference could be incorrect. In spite of all these subtleties introduced by Diṅnāga who gave a peculiarly Buddhist touch to the logic of his school, he did not succeed in formulating clear principles to the

effect that the general (*sāmānya*) is the object of inference and the particular (*svalakṣaṇa*) the object of direct perception and that identity (*svabhāva*), effect (*kārya*), and negation or non-apprehension (*anupalabdhi*) alone can be the basis of valid reasoning,—though all this is implicit in the views of Diṅnāga. It was the good fortune of Dharmakīrti to have explicitly formulated these principles on the basis of the ground-work done by Diṅnāga.

Dharmakīrti defines inference as cognition of an object through its three-fold mark (*tatra trirūpāl liṅgād yadanumeye jñānaṁ tad anumānam* —NyB., 2.3). As Dharmottara explains, inference has a conceived object, e.g. fire, since inference is a cogniton of a thing which cannot be grasped, but which can only be conceived. But its procedure consists in referring this conceived object to a real point, and thus its final result is just the same as in sense-perception—the cognition of a point-instant of reality—only in inference it is through a constructed symbol.[29]

Before coming to the Jaina definitions of inference we may note a Sāṁkhya definition quoted in the *Pramāṇa-samuccaya-vṛtti*, 1.35 and in the *Nyāya-vārttika* (p. 57), according to which when one thing is perceived, the establishment, on the basis of a relation, of the remaining factor is inference (*sambandhād ekasmāt pratyakṣāc cheṣasiddhir anumānam*).

(Compare Śabara's or Vṛttikāra's definition—*anumānaṁ jñāta-sumbandhasya ekadeśa-darśanād ekadeśāntare' sannikṛṣṭe'-rthe buddhiḥ.*—*Śābara-Bhāṣya* 1.1.5—inference is knowledge on the part of a man, who knows the relation between the two terms, of the second term, which is a thing not present to sense by means of the experience of the first term).

The Jaina logicians define inference as the knowledge of the probandum on the strength of the probans that is invariably connected with it.[30] Vādi Devasūri defines inference as the knowledge of the probandum that is brought about by the apprehension of the probans and the remembrance of

the relation of invariable concomitance between the probans and the probandum (*Tatra hetugrahaṇa-sambandhasmaraṇa-kārakaṁ sādhya-vijñānaṁ svārtham.*—PNTL., 3.10).

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Process of Inference

Thus it is clear that all schools of thought essentially agree that inference is the cognition of an unseen object on the basis of the perception of another object, which serves as the mark, and the remembrance of the relation of invariable concomitance that subsists between them. We may in this connection mention that Vātsyāyana explaining the definition of inference as 'preceded by perception' (*tat-pūrvakaṁ*) states that this expression refers to the perception of the relation between the probans and the probandum as also the perception of the probans itself; this also implies the remembrance of the probans and thus it is by means of remembrance and perception of the probans that the unperceived thing is inferred.[31] We see the fire and the smoke together; this is one perception—that of the relation between fire and smoke; after some time we see the smoke—this is the second perception. On seeing the smoke we remember the relation that we have perceived and this leads to the inference of fire, the unperceived member of the relation.

Uddyotakara, to be more precise, explains '*tat-pūrvakam*' as '*tāni te tat pūrvaṁ yasya*'. If we take up the explanation with '*tāni*', the '*tāni*' in the plural stands for all forms of valid cognition mentioned in the *Nyāya-Sūtra*, 1.1 3 (*pratyakṣa, anumāna, upamāna, śabda*) and it signifies that inference is preceded by, that is to say, based on and proceeds from all forms of valid cognition (so that inference proceeding from inference is not excluded). Even so, as a matter of fact, every inference has ultimately to rely upon perception and it is in view of this fact that Vātsyāyana speaks of inference as preceded by perception. Moreover, in order to distinguish inference from the other forms of valid cognition, the term '*tat-pūrvakam*' has to be taken as implying a further qualification and

has to be expounded as *'te pūrve yasya'* i.e. that which is preceded by two perceptions so that *anūmāna* * (—in the sense of instrument of *anumati*, inferential cognition) comes to be defined as perception which is preceded by two perceptions. The perception of smoke is perception with reference to its own object, smoke, but it is the cause of the inferential cognition of another object, fire. For being this it has to be preceded by two other perceptions. The perception of the relation of concomitance between the probans and the probandum is the first and that of the probans is the second. What happens in inference is as follows : When the man who is desirous of getting at inferential cognition perceives the probans a second time (i.e. after having perceived it previously as concomitant with the probandum) this perception arouses in the mind the impression left by the former perception which leads him to remember the relation between the probans and the probandum; and after this remembrance when he again perceives the probans this last perception along with the former perception and the subsequent remembrance becomes the *anumāna* (instrument of inferential cognition)—which is known as *liṅga-parāmarśa* (consideration of probans as invariably concomitant with the probandum). Thus perception is *anumāna* (*anumīyate anena iti*, instrument of inferential cognition).

If *'tat-pūrvakam'* is taken as *'tat pūrvaṁ yasya'* (that which is preceded by one perception), then we have to disregard the distinction made between the perception of the probans on the one hand and the perception of the relation between the probans and the probandum on the other; and then what happens is that the *liṅgaparāmarśa* comes to represent and include (*a*) the perception of the relation between the probans

* The *Vārttika* refers all along to *anumāna* as the instrument of inferential cognition. In Indian logic, *pramāṇa*, *anumāna*, etc. are used in two senses—instrument of knowledge and knowledge itself. This is especially important in the Vedic Nyāya rather than in Buddhist and Jaina schools which regard knowledge both as the means and the result. See NyB., 1.18; PM., 1.1.34-41.

and the probandum, (*b*) the subsequent perception of the probans and (*c*) remembrance of the relation perceived before, as it is this that really precedes the *anumāna.*

Special cause (*karaṇa*) of Inferential Cognition

As just seen, Uddyotakara has touched upon the problem of the most efficient instrument or special cause (*karaṇa*) of inferential cognition. Uddyotakara says: (*a*) Some people explain that it is the remembrance of the relation between the probans and the probandum that constitutes the *anumāna*; (*b*) others take this remembrance as the *anumāna*, but only in so far as it is aided by the perception of the relation of the probans and the probandum and such other factors; (*c*) still others hold that *liṅga-parāmarśa* (recognition of the probans perceived in the subject as invariably concomitant with the probandum is the *anumāna*; (*d*) in Uddyotakara's opinion all these factors mentioned by others constitute the *anumāna* as they are all equally necessary for inferential cognition, and when we examine the relative importance of these factors, it seems only reasonable to regard *liṅga-parāmarśa* as the most important. Inferential cognition follows immediately after *liṅga-parāmarśa*, which should, therefore, be regarded as its *karaṇa* (instrument). Further on he says, it is only right to hold that what brings about inferential cognition is *liṅga-parāmarśa* as aided by remembrance (*smṛtyanugṛhita-liṅga-parāmarśa*), and it is only thus that *upanaya*, the fourth member of the syllogism acquires significance.[32]

Śrīdhara, on the other hand, points out that the instrument of inferential cognition is, according to Praśastapāda, the experience of the probans (—smoke—) together with the memory of the relation of universal concomitance (*vyāpti*). This, in his view, leaves no scope for *liṅga-parāmarśa* (e.g. On this hill there is smoke which is pervaded by fire—*vahnivyāpya-dhūmavān ayaṁ parvataḥ*), the statement of which is assigned as the special function of the fourth member (*upanaya*) of the syllogism, as distinguished from the statement of the *liṅga*, which is commonly assigned as the function of the second member

(*apadeśa*) of the syllogism. Even if *liṅga-parāmarśa* is not recognised as an instrument of inferential cognition, the *upanaya*, the fourth member of the syllogism does not become functionless, as the *upanaya* is set forth in *parārthānumāna* (inference for another) for the purpose of conveying the *pakṣa-dharmatā* (the residence of the probans in the subject) which has not been conveyed by the other members of the syllogism.[83]

According to the Buddhist, the Jainas and some Naiyāyikas, it is the *liṅga* known as such that is the *karaṇa* of inference. For the Mīmāṁsakas and the Vedāntins, the knowledge of *vyāpti* as revived in our mind when we see the *liṅga* is the *karaṇa* of inference. In the view of the Navya-Naiyāyikas, the *liṅga* cannot be a *karaṇa* as it may also be a thing of the past or future. Moreover, it cannot lead to the conclusion except through the knowledge of the *vyāpti* between the *liṅga* and the *sādhya*. Hence, the knowledge of *vyāpti* should be taken as the *karaṇa* of inference. But this does not immediately lead to the conclusion. It has for its *vyāpāra* (operation) a consideration of the middle term as related to the major term on the one hand and the minor on the other. i.e. the *liṅga-parāmarśa*; and it is through the *liṅga-parāmarśa* that the knowledge of *vyāpti* leads to the conclusion. Thus, while the knowledge of *vyāpti* is the *karaṇa* or special cause of inference, *liṅga-parāmarśa* is the immediate cause (*carama-kāraṇa*) of inference (See *Tattva-cintāmaṇi*, II, pp. 521–551—B I). Some later Naiyāyikas regard *liṅgaparāmarśa* itself as the *karaṇa* of inference (See *Tarkasaṅgraha*, 45).

Probandum

We may now state briefly the different views as to the nature and form of the probandum (*anumeya*). Vātsyāyana ordinarily speaks of fire being inferred through smoke (See NB., 1.1 5). He has also taken note of the two-fold significance of the term *sādhya* : (*a*) property qualified by the thing, or (*b*) the thing qualified by the property (*sādhyaṁ ca dvividhaṁ dharmiviśiṣṭo vā dharmaḥ śabdasyā'nityatvaṁ, dharma-*

viśiṣṭo vā dharmī anityaḥ śabda iti.—NB., 1.1.35). But he does not specifically raise the problem, which Diṅnāga, Uddyotakara and Kumārila discuss, viz. What is it that is inferred in an inference? Diṅnāga says that some hold that we infer fire from smoke, others that we infer the relation between fire and hill. Diṅnāga rejects these views and holds that we infer 'fiery hill'. According to Kumārila also the probandum is 'fiery hill' (Ślv.,-*Anumāna*, 27ff). The idea is that fire by itself cannot be the object of inference from smoke. We know it just when we know the smoke as invariably concomitant with fire. Nor do we infer the relation between fire and hill; we cannot speak of a relation unless there are two things to be related, while here the fire is not perceived. What is, therefore, inferred is 'the hill as possessed of fire.'

Uddyotakara, on the other hand, holds that the probandum or the inferendum is fiery smoke, or middle term as qualified by the major term. In his *Nyāya-Vārttika*, pp. 50-51, he asks. "What is it that is apprehended through that smoke? Is it fire or place or existence or fire-possessing place that is so apprehended? Not fire, because the relation of property and the thing possessing the property (*dharma-dharmi-bhāva*) is not possible between them; and fire is not a property of smoke nor smoke of fire; and further because fire is already apprehended, and therefore cannot be a thing to be proved (*anumeya*). Similarly existence and place cannot be the *anumeya* as they are already apprehended. Place as possessed of fire also cannot be the *anumeya*, because smoke is not its property. Nor can it be said that the relation of fire to place as such is known and is so one that can be proved, because it is already known that fire is related to place. Similarly, a particular place cannot be inferred as possessing fire, because the person who advances the argument does not see the particular place which serves as the locus or origin of the smoke. It cannot also be said that smoke as such brings about the cognition of fire, for if an observer were to see smoke as such, then the particular place could not be inferred as fiery, Uddyotakara goes

on to examine the concept of *avinābhāva* (inseparable connection) between smoke as such and fire as such. What is meant by *avinābhāva* ? Does it mean causal connection, or inherence (of both) in one thing, of one thing in them both, or simple relation of one to the other (*kiṁ kāryakāraṇabhāvaḥ utaikārtha-samavāyaḥ tatsambandhamātraṁ vā.*—NV., p. 50). *Avinābhāva* cannot signify the relation of cause and effect, because smoke does not reside in fire or fire in smoke, as each of these resides in its own (material) cause. (As Vācaspati says, only material causation is considered here because the other two kinds of causation are not cases of inseparable connection). The second alternative also is not possible. Smoke and fire are not the constituent or material causes of one thing which resides in them as their effect, for a substance cannot be constituted of two heterogeneous things; and the supposition of both these as residing in a third thing which is their constituent cause has been set aside by saying that each of these resides in its own material cause. Inference is impossible even in the case of the third alternative. We have no such experience as would justify the *vyāpti* (pervasion) of smoke by contact with fire, for we often have experience of smoke in the absence of fire, i. e. of smoke not in contact with fire. (Uddyotakara should not, it may be noted, be misunderstood to maintain that smoke can exist without fire), It may be urged that the relation between fire and smoke is co-presence (*sāhacarya*), like that between the two qualities, colour and touch in substances. Uddyotakara's reply is that this will not serve any purpose; their connection is not invariable and therefore co-presence as implying universal connection cannot be asserted. The formula, ' Where there is smoke, there is fire ' is rejected by this very argument. And there is no other way of interpreting the *avinābhāva* of smoke and fire. Therefore, it is not true that fire is inferred from smoke.

But would it not be contradictory to state that we do not infer fire from smoke ? There is no such contradiction,

replies Uddyotakara. What is inferred from a particular smoke is that the smoke has fire as its property or fiery smoke. Both are present at that time to sense, viz., the smoke and its characteristics such as its forming an unbroken mass, movement upwards, etc. And these characters of the smoke as observed in it bring about the inference of a character not known directly to the observer. In the case of every object of inference, the locus of the properties and the property that brings about the conclusion are known. For instance in the inference 'Word is impermanent, because it is a product', word is known as what it is and the fact that it is a product is known, but the character 'impermanence' is not known, and it is this that is inferred as a qualifier of that (i.e. word); (*sarvasyānumeyasya vastuno dharmī pratipādakaś ca dharmaḥ prasiddho bhavati; yathā śabdasyā" tmasattā prasiddhā kṛtakatvaṁ ca dharmas tv anityatvalakṣaṇo'prasiddha iti. tad-viśeṣaṇo'yam anumīyata iti.*—NV., p. 51). Uddyotakara should not be understood as banishing the subject (*pakṣa*) of an inference altogether. What he points out is that the case of the co-existence of two things (smoke and fire) on a hill is an accidental one and it can happen that a hill, which is what we might call the accidental *dharmī* of these *dharmas*, may not be present to sense, and then it is obvious that the accidental *dharmin* is no essential part of the *anumeya*. But where the *pakṣa* is seen, it is inferred as qualified by fire. This is how Vācaspati tries to explain away the non-mention by Uddyotakara of the *pakṣa* in the probandum.[54] We cannot say whether Uddyotakara had this in his mind or not. Perhaps what Uddyotakara means is that the *pakṣa* is not directly connected with what is to be proved from the reason. There being a substratum(—whatever it be—) of the probans we infer the existence of the probandum through it there.[55] According to the Advaitin what is inferred is the unperceived property of the subject (*pakṣa*). In the inferential cognition that the hill is fiery, it is the fire that is inferred and not the hill which is already perceived.

Requisites of a true probans

The Vaiśeṣikas, the Naiyāyikas, the Mīmāṁsakas and the Bauddhas contend that the probans in order to be a true one must subsist in the subject (minor term), must exist in some or all homologues where the probandum is known to exist, and must be absent in heterologues where the probandum is known to be absent (*pakṣe sattvam, sapakṣe sattvam, vipakṣād vyāvṛttiḥ*). Dharmakīrti (and before him Śaṅkarasvāmin) tried to make these rules precise with the help of the restrictive particle 'eva'—*pakṣe sattvam eva* (necessary subsistence in the *pakṣa*), *sapakṣe eva sattvam* (presence in homologues only, never in heterologues) and *vipakṣād vyāvṛttir eva* or *vipakṣe asattvam eva* (necessary absence in heterologues).[36] Vācaspati mentions two more—*asatpratipakṣatva* (absence of a counter-balancing probans) and *abādhitaviṣayatva* (absence of contradiction—or the object i.e. the probandum should not be contradicted by a stronger means of proof). Uddyotakara and Vācaspati waive one of the conditions—*sapakṣe sattvam* and *vipakṣād vyāvṛttiḥ* in the case of *kevala-vyatirekin* (universal-negative) and *kevalānvayin* (universal-affirmative) types of inference respectively as it is not possible to adduce any *sapakṣa* in the former, and any *vipakṣa* in the latter.[37] In 'The pot can be named, since it is knowable', the concomitance is positive only (*kevalānvayin*) (viz. 'What can be known can be named'); but the negative proposition, 'What cannot be named cannot be known' cannot be established since no example can be adduced to illustrate it. On the other hand, in the case of 'Living organisms have souls because they possess vital functions', the concomitance can be negative only (*kevala-vyatirekin*) (viz. 'What has no soul has no vital function, as for example jar'); the positive concomitance, 'That which has vital functions has a soul' cannot be illustrated since the probandum has the same extension as the subject and cannot therefore be found anywhere else. It may be noted here that though according to these rules, 'The jar is nameable because it is knowable' is a valid inference of the *kevalānvayin* type, 'Everything

is nameable because it is knowable' is not valid, because neither any *sapakṣa* nor any *vipakṣa* is available, and to quote a part of the *pakṣa* itself as an example would be to beg the question. The Jaina logicians find nothing objectionable in finding the evidence for the conclusion in the *pakṣa* itself. This was recognised in the doctrine of *antarvyāpti* (See *Nyāyāvatāra*, 23).

The difficulties which arise in connection with the formulation of the three rules (*pakṣe sattvam eva*, etc.) with the help of the restrictive particle '*eva*' have been pointed out by Uddyotakara. If the rules are read without the '*eva*' (*pakṣe sattvam*, etc.), then the first rule will not exclude such arguments as 'Atoms are impermanent because they are odorous, like a jar', that is to say, arguments which are invalid because the probans is *sādhyaikadeśavṛtti* (subsisting in only a part of the subject—as only earth-atoms are odorous and no other kind of atoms). In order to exclude such inferences, it is essential to introduce the requirement that the probans should be *sādhya-vyāpaka*, subsisting in the entire subject and not *sādhyaikadeśavṛtti*. The Buddhist does this by inserting '*eva*'. Uddyotakara asks, "What restriction is intended—(*a*) *anumeye sadbhāvaḥ eva* (existence only in the subject), or (*b*) *anumeya eva sadbhāvaḥ* (existence in the subject only)?" The second contradicts *sapakṣe sattvam* and so cannot be accepted; morever it does not convey that the probans is present in the entire *pakṣa*. Again does the '*eva*' in the second rule mean (*a*) *tat-tulya eva sadbhāvaḥ* or (*b*) *tat-tulye sadbhāva eva*? The former is impossible as it would contradict the first rule. It is not possible to say, 'Feed only Devadatta; and Yajñadatta'; so here also to say, 'The probans exists in the *sapakṣa* only; and in the *pakṣa*' would be the language of a lunatic. *

* Dharmakīrti however defended this position with the help of '*samuccīyamānāvadhāraṇa*' (aggregate restriction), as is stated by Vācaspati. (See NVTT., pp. 171 ff), See *Indian Logic in the Early Sahools*', pp. 257–262.

According to the second interpretation, the middle term must exist in all *sapakṣas*, so middle terms which reside in some but not in all *sapakṣas* would be excluded. Moreover, a middle term (—in a *kevalavyatirekin*) is valid even if it subsists in no *sapakṣa* (as there are no *sapakṣas*). The third rule also with the '*eva*' can mean : (a) '*vipakṣe eva abhāvaḥ*', or (*b*) *vipakṣe abhāva eva*? The former excludes middle terms which are absent in some *sapakṣas* besides being absent in *vipakṣas*; and the latter has already been stated by '*tat-tulye eva sadbhāvaḥ*'.[38]

The Jaina logicians, on the other hand, contend that the knowledge of the necessity of invariable concomitance alone can prevent the fallacies of probans or the middle term from entering into the field of reasoning, and it is not necessary to recognise these rules of *pakṣe sattvam*, etc. Necessary universal concomitance (*avinābhāva*) consists in the incompatibility of the probans with the contradictory of the probandum (*anyathā'-nupapannatva*). This condition of incompatibility with the contradictory is not found to hold good in the case of a middle term which is *asiddha* (unreal or unestablished), *viruddha* (contrary) or *vyabhicārin* (inconclusive). With regard to the triple characteristic it may be pointed out that a middle term is found to be non-probative in spite of the fact that it has all these characteristics if the condition of invariable concomitance is not satisfied. The inference 'The future son of Maitra must be of a dark complexion, because he is the son of Maitra, like other sons of Maitra' is an instance in point.[39] It may be urged that the necessity of absence in dissimilar cases (*vipakṣād niyamavān vyāvṛttiḥ*) is not satisfied by the probans in the above inference and the non-probativeness is due to this defect. The answer to this is that in that case the condition, 'necessity of absence in dissimilar cases' should alone be regarded as the necessary condition of invariable concomitance since the absence of this condition in spite of the presence of other conditions can render a probans non-probative or incapable of proving the probandum. Thus, this alone should be regarded as the predominant or rather the only

characteristic of a valid probans. Even subsistence in the *pakṣa* is not a necessary condition because the following inference is known to be valid: 'The constellation Rohiṇī will appear as the Kṛttikā has appeared.'[40] Further, the favourite inference of the Buddhists and the very basis of their metaphysical structure. viz 'Everything is momentary, since it is existent (*sarvaṁ kṣaṇikaṁ sattvāt*) should be held to be invalid if the three characteristics of a valid probans cannot be waived, as the probans 'existent' does not occur in *sapakṣas* (since there is no *sapakṣa*—every existent being included in the subject, there is nothing outside it which can serve as an example). But they recognise it as valid. Hence it has been rightly said: "What does the triple characteristic avail if incompatibility with the contradictory is present? And what would again this triple characteristic avail, if incompatibility with the contradictory is absent?"

(*Anyathā'nupapannatvaṁ yatra tatra trayeṇa kim;*
nānyathā'nupapannatvam yatra tatra trayeṇa kim.)[41]

The additional characteristics, viz. absence of a counterbalancing probans and absence of contradiction of the probandum are equally unwanted for they are but an elaboration of the necessity of invariable concomitance. The necessity of invariable concomitance includes these two characteristics and hence their addition is a superfluity. Thus, according to the Jaina logicians, it is sufficient in order that an inference be valid, that the probans should have the only characteristic of standing in the relation of invariable concomitance with the probandum.

Inference for oneself *(svārthānumāna)* **and Inference for another** *(parārthānumāna)*:

Inference, as seen above, is the cognition of the probandum on the basis of the knowledge of the probans, it being one of the two terms between which there is the relation of invariable concomitance, and the probandum being the other term. One may infer to oneself or communicate the inference to

another. What is the difference between oneself inferring and making others infer? The difference is really not logical but psychological. In fact, all the conditions of valid inference have to be satisfied in both. In one case they remain more or less implicit, whereas in the other they have to be made explicit according to the needs of the other party. Veṅkaṭanātha does not recognise this two-fold classification. Even though the inference for another is understood through the statement, the hearer is not convinced only by the statement unless his own mind grasps the *vyāpti* and the fact of the middle term which is invariably concomitant with the major term and therefrom infers after receiving hints from the teacher and the like. If simply on account of being propounded by a syllogistic statement, *anumāna* would become '*parārtha*', 'for another', then all *pramāṇas* would have to be regarded as two-fold (See NP., pp. 154–126). It is, however, in the process of making all the conditions explicit that, one may say, the development of logical thought lies. So this may be regarded as an illustration of a social need becoming responsible for the development of logical thought. One might go a step further and say that it is actually in intellectual intercourse that the progress of inferential thinking becomes possible. The difference between *svārthānumāna* (inference for oneself) and *parārthānumāna* (inference for another or syllogism) is thus a difference, as Stcherbatsky says, between that form of the inferential judgement which it usually has in the natural run of our thinking and acting process, and another form which is most suitable in science and in a public debate. In a public debate the universal or major proposition is rightly put forward as the foundation of the reasoning, on which should follow the application or the minor proposition; whereas in the actual thought process the universal judgement is not necessarily present to the mind, it seems hidden in the deeper recesses of our consciousness as though controlling the march of thought from behind the screen. Our thought leaps from one step to another, and a reason seems to suggest

itself to the mind; its invariable connection with the predicate lies apparently dormant in the mind and reveals itself only when due attention is paid to it.[42]

The Buddhists accordingly illustrate the two kinds of inference as follows :

(a) *Svārthānumāna—agnir atra, dhūmāt* (There is fire here, because there is smoke).

(b) *Parārthānumāna* — (i) *yatra dhumas tatrā'gnir yathā mahānasādau,* (ii) *asti ceha dhumaḥ* (wherever there is smoke there is fire, just as in the kitchen and the like; and there is such smoke here).

It may be noted here that the Buddhist logicians before Diṅnāga ordinarily employed the traditional type of syllogism of five members (*avayavas*). Perhaps Asaṅga for the first time in his *Yogacaryābhūmiśāstra* acknowledged that the last two members are useless thus reducing the syllogism practically to three members only. Even in Asaṅga's *Saṅgīti* we find the syllogism of five members (See JRAS, July, 1929, pp. 475-477).

The Naiyāyikas and the Vaiśeṣikas recognised five members of syllogistic inference (See NS., 1.1.32) :

1. *Pratijñā* (thesis)—*Parvataḥ vahnimān* (There is fire on the hill),
2. *Hetu* (reason)—*dhūmāt* (Because of smoke),
3. *Udāharaṇa* (example)—*yatra yatra dhūmas tatra tatra vahṇiḥ, yathā mahānase* (wherever there is smoke there is fire, as in the kitchen),
4. *Upanaya* (application)—*Tathā cāyaṁ vahnivyāpyadhūmavān*) (and there is such smoke—as is pervaded by, or invariably concomitant with, fire—on the hill),
5. *Nigamana* (conclusion) * —*Tasmāt tathā* (Therefore, it is such i.e., having fire).

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* Praśastapāda terms the five members of the syllogism—*pratijñā, apadeśa, nidarśana, anusandhāna, pratyāmnāya* (See PB., pp. 114 ff).

The Buddhist syllogism, as shown above, has two members (*avayavas*)—the general rule including the example, and the application implying the conclusion. Dharmottara says that there is no absolute necessity of expressing separately the conclusion. Supposing the reason has been cognised as invariably concomitant with the deduced property; we then know the major premiss. If we then perceive the presence of that very reason in some definite place, that is to say, if we know the minor premiss, we already know the conclusion. The repetition of the deduced conclusion does not serve any purpose.[43] Dharmakīrti states in his *Pramāṇa-Vārttika* that even one member, reason, would suffice (—of course the rest would be implied in the discussion and could be easily comprehended by an intelligent person from the context).[44]

The Sāṁkhyas have adopted the syllogism of three members (thesis, reason, example) (See Māṭhara on *Sāṁkhya-kārikā*, 5). The Mīmāṁsakas, according to Vādi Devasūri, recognise three members (See *Syādvādaratnākara*, p. 559), but Hemacandra and Anantavīrya are of the view that they adopt four members (See *Pramāṇamīmāṁsā-Vṛtti*, 2 1.9; *Prameyaratnamālā* 3.37). Śālikanātha and Pārthasārathi Miśra have given illustrations of syllogisms with three members (See *Prakaraṇa-Pañcikā*, pp. 82-83; *Nyāyaratnākara* on *Ślokavārttika*, *Anumāna*, 53-54). There might have been two traditions among the Mīmāṁsakas. The Jaina logicians ordinarily recognise two members—thesis, and reason—but are not rigid on this point. According to them even one member may be used, viz. the reason (See *Syādvādaratnākara*, p. 548) or two or three or even five, or to go further, even ten *avayavas* as recognised by Bhadrabāhu (4th cent. A.D.) (—See *Syādvādaratnākara*, p 565—) according to the intellectual capacity of the person who is to be convinced.[45] But all this long-drawn statement is not necessary in an actual discussion carried on by intelligent persons—though it might be admitted in books on logic for the sake of clarification promoting easy understanding—where

only two members, thesis and reason, are sufficient (*bāla-vyutpattyartham tat-trayopagame śāstra evā'sau na vāde'-nupayogāt.*—PMS., 3.46).

Vādi Devasūri says that debates are classified according to the number of members in the syllogisms employed. That in which the syllogism has only one member, the *liṅga* (probans), is regarded as the lowest; that in which two or more members are employed is middling, and that in which the syllogism consists of ten members is the best (SVR., p. 565).

It appears that a ten-membered syllogism was in vogue before the emergence of the five-membered syllogism in the Nyāya tradition. As mentioned by Vātsyāyana, the five additional members are: *jijñāsā* (desire to know), *saṁśaya* (doubt), *śakyaprāpti* (belief in the possibility of solution), *prayojana* (purpose), *saṁśayavyudāsa* (dispelling of doubt) (See *Nyāya-bhāṣya*, 1.1.32). Vātsyāyana says that *jijñāsā*, etc. cannot be regarded as organic parts (*ekadeśa, aṅga*) of the probative statement (*sādhaka-vākya*) as they do not prove anything. Yet even these have their use in a debate or discussion inasmuch as they help to initiate a debate and help its procedure by the statement of the desire to know a problem, the doubt regarding it and the like. As Udayana says, while *jijñāsā*, etc. help the discussion by their very presence, the statement of the proposition and the rest do so by their being known. If the desire to know is only present the discussion can proceed; it is not necessary to know or apprehend the desire. But the statement of the proposition and the rest should be themselves known before they can lead to the definite knowledge of things. These five additional members are certainly phases in the psychological process of reasoning; but they have no place in the logical development of an argument. Perhaps it was the practice at that early period to state the desire to know and the rest in the course of the debate, these marking the different phases of the procedure of the debate. It is the contention of A. B. Dhruva that the inference referred to by Vātsyāyana as belonging to some (*eke*) Naiyāyikas and as having ten members

must have been of a section of the earlier Mīmāṁsakas s the five additional members have a Mīmāṁsā ring about them.[46]

The ten members of a syllogism mentioned by Bhadrabāhu in his *Daśavaikālika Niryukti*, 137 are : (1) *pratijñā* (thesis), (2) *pratijñā-vibhakti* (limitation of the thesis), (3) *hetu* (reason), (4) *hetu-vibhakti* (limitation of the *hetu*), (5) *vipakṣa* (counter-proposition), (6) *vipakṣapratiṣedha* (denial of the counter-proposition), (7) *dṛṣṭānta* (example), (8) *ākāṅkṣā* (doubting the validity of the example), (9) *ākāṅkṣā-pratiṣedha* (dispelling of the doubt), (10) *nigamana* (final conclusion).[47]

Bhadrabāhu illustrates these as follows :

1. *Dharma* (righteous act) is most *maṅgala* (auspicious) (—*pratijñā*);
2. Only here in the Jaina school of thought (—because in drinking water not passed through a piece of cloth and the like, the ascetics of other schools cause injury to living beings) (—*pratijñā-vibhakti*);
3. Because he who abides in the highest abode of righteousness, is adored by the gods and the like (—*hetu*);
4. Only those who are free from passions and deceit, and live without killing living bein^s, abide in *dharma* (—*hetu-vibhakti*);

5a. People bow down to the father-in-law and the like—who are opposed to the teaching of the Jina, whether they have a liking for *dharma* or not—regarding them as auspicious (—*pratijñā-vibhaktyoḥ vipakṣaḥ*);

5b. Even sacrificers are adored by the gods (—*hetu-vibhaktyoḥ vipakṣaḥ*);

6a. *Karma* such as brings about pleasant sensation, right attitude, laughter, love, good life, figure, lineage, etc. are the result of *dharma* (enjoined by the Jina), so *dharma* alone is *maṅgala* and not father-in-law and the like (—*pratiṣedha* of the *vipakṣa* of *pratijñā* and *pratijñā-vibhakti*);

6b. If the unrestrained, passionate, deceptive killers (i e. sacrificers) be adored, then fire should be cool (—*pratiṣedha* of the *vipakṣa* of *hetu* and *hetu-vibhakti*);

7. Like the Arhats and their followers, the ascetics with even minds, who are in search of house-holders who cook for themselves, and are not those who cause injury (—*dṛṣṭānta*, example);
8. This is not a good example because householders cook keeping in view even the ascetics; and even Buddha and others are honoured by the gods (—*āśaṅkā*);
9. Rain does not fall for vegetation, and grass does not grow for the beasts, similarly householders do not cook for the monks. Buddha and others are said to have been honoured only secondarily whereas it is the Jinas who are honoured in the true sense of the term (—*dṛṣṭānta-vipakṣa-pratiṣedha*);
10. Therefore being adored by gods and men *dharma* is always auspicious (—*nigamana*).[48]

Bhadrabāhu has given two sets of ten *avayayas*—(a) *pratijñā, pratijñā–viśuddhi, hetu, hetu–viśuddhi, dṛṣṭānta, dṛṣṭānta–viśuddhi upasaṁhāra, upasaṁhāra-viśuddhi, nigamana, nigamana-viśuddhi*; (b) the members illustrated above, *pratijñā, pratijñā-vibhakti*, etc. (*Daśavai., Nir. Gāthās* 92 ff, 137 ff). In (a) in *pratijñā–viśuddhi* and the like, the significance of the terms is clarified and explained—mostly in the light of the Jaina view.

It is obvious that in Bhadrabāhu's syllogism the opponent is also kept in view and his likely objections are anticipated and answered at every step. Even the syllogism of five *avayavas* as found in the *Nyāya-sūtra* and other works has in view a debate and hence the need of five members to convince the other person by enunciating the proposition to be proved, and stating the reason for it, then reminding him of the invariable concomitance between the probans and the predicate positively or negatively and checking and illustrating this by citing an example that is known by both to have both the attribute that serves as the *liṅga* (probans) and the predicate (major term) or that is known to have neither the *liṅga* nor the predicate, and specifically stating that the *liṅga* which is

invariably concomitant with the predicate is present in the *pakṣa* or the subject—the thing which the two are discussing about, and so the predicate also must be present in it.

As to the suggestion that it can be left to the other party to supply one or more premisses, Śrīdhara answers that *parārthānumāna* is not addressed to the expert and the form of the syllogism cannot be determined in accordance with the degree of understanding of the person addressed; for, on account of the difficulty of getting at other people's mental processes, it is impossible to say just how many premisses would produce understanding and how many would fail to do so in any particular case (*na ca pratipādyasya kiyaty aṅge pratipattir asti kiyati nāstīti śakyam avagantum paracittavṛtter durunneyatvāt—Nyāya-kandalī*, p. 253). He quotes a stanza from an unidentified source to the effect that the statement of inference must follow the nature of the thing and not the nature of the persons to whom it is addressed. Morever, if the statement of inference is incomplete leaving the hearer to understand the rest, there would be no difficulty artificially created by the opponent in a *vāda* or genuine discussion, but the opponent would certainly take advantage of this incomplete statement and explain it irresponsibly and differently so as to embarrass the opponent. It is because of this that *nyūna*, *adhika*, and *aprāptakāla* are recognised as *nigrahasthānas*. Vadivāgiśvarācārya (first half of the 12th century), the author of the *Mānamanohara*, (—a work of the Vaiśeṣika school—) perhaps under Buddhist influence, feels that strictly speaking only two members—*udāharaṇa* and *upanaya*—or *vyāpti* and *pakṣadharmatva* are really necessary (see *Mānamanohara*, pp. 85-87). He does not also see the necessity of the *anvaya-vyatirekin* (affirmative-negative) *anumāna*, when the affirmative or the negative inference is singly capable of achieving what is expected of it.

Venkaṭanātha is not at all particular about the number of *avayavas* in a syllogism so long as it serves its purpose (See NP., p. 159 ff).

Inference for another can be two-fold according as it is formulated by the method of agreement (*sādharmya*) or by the method of difference (*vaidharmya*)
For instance,

(*a*) (*i*) Hill has fire,
(*ii*) because it has smoke;
(*iii*) Wherever there is smoke there is fire, e.g. in a kitchen;
(*iv*) And there is such smoke on the hill;
(*v*) Therefore there is fire on the hill (—*sādharmyeṇa*).

(*b*) (*i*) Hill has fire;
(*ii*) because it as smoke;
(*iii*) Wherever there is absence of fire, there is absence of smoke, e.g. in a lake;
(*iv*) The hill is not a place where there is absence of such smoke;
(*v*) Therefore there is not the absence of fire (—*vaidharmyeṇa*)

The difference between these two is due to the consideration of the logical possibility of the probans on the occurrence of the probandum and secondly of the logical impossibility of the probandum in the absence of the probans But the difference between these two is not in respect of the ultimate intent, so the statement of inference by both the methods is not considered necessary by the Buddhist and the Jaina logicians.[49] The double formulation is meant to guard against incomplete induction.

The logicians of the Nyāya school from Uddyotakara onwards, as said above, classified inference for another as *anvaya-vyatirekin* (affirmative-negative), *anvayin* (purely affirmative), and *vyatirekin* (purely negative). These have been illustrated above. The favourite syllogism of the Buddhists, viz 'Everything having a cause is impermanent, the jar is such' is purely affirmative and so would be invalid should the Buddhists

insist on all the three rules pertaining to the reason, as the condition of '*vipakse asattvam*' is not satisfied here. The Buddhists maintain, on the other hand, that there is a *vipakṣa*, viz. ubiquitous unchanging *ākāśa*; a negative example or a *vipakṣa* need not necessarily be a real entity. For logical purposes, to serve as a contrast, such an example would be quite sufficient.[50] An instance of a purely negative inference is : 'The living body cannot be soulless, because it is not devoid of vital functions (*nedaṁ jīvac-charīraṁ nirātmakam aprāṇādimattvavirahāt*). There are no positive examples to prove this concomitance because the *pakṣa* comprehends all cases of such concomitance, but there are numerous examples where the two characters are both absent (what is devoid of vital functions is soulless, e.g. a log of wood). According to the Naiyāyikas these examples have the force to prove the invariable connection of the living body with a soul. According to the Buddhists they prove nothing, the deduction is a fallacy of the *asādhāraṇa* variety. The negative examples are a corollary from the positive ones. If there are no positive examples there cannot also be negative ones. The Jaina logicians do not accept the three rules for a reason, hence this does not come in their way of accepting this inference as valid. In fact, the Jainas recognise *antarvyāpti* where the concomitance between the probans and probandum holds good only in the case of the *pakṣa* and no positive or negative example can be cited.

The Advaita Vedāntins do not recognise the classification of inference into *kevalānvayin, kevala-vyatirakin* and *anvaya-vyatirekin*. According to them inference is of only one kind, viz. *anvayin*. The knowledge of *vyāpti* (invariable concomitance between the probans and the probandum) is arrived at through the observation of agreement in presence between these two terms with the non-observation of any contrary instance. Hence all the propositions of the syllogism must be of the affirmative kind. But there cannot be any *kevalānvayin* in the sense of an inference in which the predicate is a character

that is not anywhere non-existent (—all empirical things being negated in Brahman, the Absolute Reality). The Advaitins do not recognise *vyatirekin* inference but have instead *arthāpatti* (postulation), which the Naiyāyikas and others except the Mīmāṁsakas do not recognise as a distinct *pramāṇa*. They contend that when a person infers fire from smoke he depends on the knowledge of *vyāpti* between the presence of smoke and that of fire and not between the absence of fire and that of smoke. Not admitting the *vyatirekin* inference, the Advaitin does not admit the *anvaya-vyatirekin* also which is a synthesis of the *anvayin* and *vyatirekin* forms of inference (See *Vedāntaparibhāṣā*, Ch II). Venkaṭanātha of the Rāmānuja school admits two forms—*anvaya-vyatirekin* and *kevalānvayin* (See NP., p. 121 ff).

It may be noted in passing that the Naiyāyikas and others try to reduce *arthāpatti* (postulation)—which is regarded by the Mīmāṁsakas as a distinct source of knowledge—to inference of the *vyatirekin* type. But the Bhāṭṭa Mīmāṁsakas have exposed the futility of this attempt. (See *Śāstradīpikā*, pp. 76ff). *Arthāpatti* consists in the supposition of some unperceived fact in order to explain a given fact. When a given or perceived fact cannot be explained without some other fact we have to postulate the existence of this other fact though we have no direct knowledge of it (*arthāpattir api dṛṣṭaḥ śruto vā artho'nyathā nopapadyata ity arthakalpanā* — *Śāstradīpikā*, p. 76). For instance, to explain the absence of a man, who is living, from his house, we suppose that he has gone out. Unlike as in inference, here we proceed from the knowledge of something to be explained to the knowledge of that which explains it. Moreover, in instances such as the above one, there is no real *vyāpti* underlying it. 'A living man is either at home or out of it' is not a generalisation from the particular facts of experience.

It may be noted here that Dharmottara testifies that Diṅnāga was the first to draw a hard and fast line between inference for oneself (*svārthānumāna*) and syllogism (*parārthānumāna*).

The second is regarded by Diṅnāga not as a source of knowledge at all but as a method of correctly and convincingly expressing it in a series of propositions for the benefit of the audience.[51] When an inference is communicated to another person it is stated in a set form, in a syllogistic form, and this statement is called inference only metaphorically, as the syllogism is the cause which produces an inference in the mind of the hearer [52] According to the Buddhist logicians, inference deals with the general (*sāmānya*) just as pure perception, free from conceptual construction, which alone is recognised as valid by them, cognises the extreme particular. Such an inference must be separated from a series of propositions used for conveying a thesis to an audience—the credit for such a clear distinction going to Diṅnāga as stated by Dharmottara. We do not find in the works preceding the period of Diṅnāga any mention of the distinction between inference for oneself and inference for another. As said above the difference between the two is not a logical one, but a psychological one. Gautama, Kaṇāda, Vātsyāyana and Vasubandhu do not refer to this distinction. Praśastapāda probably a contemporary of Diṅnāga was the first to introduce it in the Vaiśeṣika system. Of course, in the *Nyāyasūtra*, we can find some inkling of the distinction as inference is mentioned as one of the sources of cognition (*pramāṇa* and the five-membered syllogism is separately mentioned as one of the topics *(padārthas)* of the Nyāya school The five-membered syllogism—a brief form of an early ten-membered one—is regarded not as an inference emerging in the mind of the hearer but as a faithful and adequate description of the gradual steps of our thought in a process of inference These steps must be repeated when an inference is communicated to someone else. The early Naiyāyikas did not stress this difference—perhaps because it is only a psychological one, rather then a logical one. But even the Naiyāyikas followed the example of the Vaiśeṣikas, though at a later stage and explicitly incorporated the two-fold varieties

of *svārthānumāna* and *parārthānumāna* as can be seen from the works of Bhāsarvajña, Gaṅgeśa and others.

Vyāpti **and how it can be determined**

Finally, we come to the most important problem connected with inference, that of *vyāpti* (invariable concomitance between the middle term and the major term) which is the very ground of inference. *Vyāpti* literally means 'pervasion'. It thus implies a correlation between two terms, one of which is pervaded by the other (e.g. smoke and fire, where smoke is pervaded by, that is to say, is less extensive than fire), or which are of equal extension (e.g. knowability and nameability, or a substance and its peculiar attribute—earth and smell and the like) The former is called *asama vyāpti* or *viṣama-vyāpti* (non-equipollent concomitance) and the latter *sama-vyāpti* (equipollent concomitance). In the former we can infer the pervader or determinant concomitant (*vyāpaka*) (e.g. fire) from the pervaded or determinate concomitant (*vyāpya*) (e.g. smoke), but not vice versa; whereas in the latter we may infer either from the other. *Vyāpti* between the middle and major terms means generally a relation of co-existence *(sāhacarya)* between the two. But every case of *sāhacarya* is not a case of *vyāpti*. All the children of a father may be dark but this does not signify that there is *vyāpti* between a particular parentage and dark complexion. Similarly, there may be fire with or without smoke. In such cases the relation of co-existence is dependent on certain extraneous conditions (e.g. certain physiological conditions and moist fuel respectively). So we can say that *vyāpti* is the relation of co-existence between the middle and the major terms which is independent of all extra conditions (*upādhis*); it is an invariable and unconditional relation (*niyata anaupādhika sambandha*) of co-existence between two terms—the middle and the major terms of an inference. *Vyāpti* as the logical ground of inference may be defined either positively or negatively. Positively speaking, *vyāpti* is the uniform co-existence of the middle term in the same locus with the major term such that the major term is not absent in any locus

in which the middle term is present. To put it in Navya-Nyāya terminology, *vyāpti* is a relation of co existence of the middle and the major terms in the same locus so that the latter is not a counter-positive of negation abiding in the locus of the middle term (*atha vā hetumanniṣṭha-virahāpratiyoginā sādhyena hetor aikādhikaraṇyaṁ vyāptir ucyate.—Bhāṣā-pariccheda*, 69; see also *Tattvacintāmaṇi* II, p.610ff*). *Vyāpti* is negatively defined as the non-existence of the middle term in all the places in which the major term is absent (*vyāptiḥ sādhyavad-anyasminnasaṁbandhaḥ.—Bhāṣā-pariccheda*, 68). These two definitions of *vyāpti* give us two universal propositions, positive and negative. Hence *vyāpti* is said to be of two kinds—*anvaya* (positive) and *vyatireka* (negative).

How is *vyāpti* determined? It is ordinarily believed that this is done by the repeated perception (*bhūyodarśana*) of the connected presence of two things and the absence of any contradictory experience. If it is perceived that the major term invariably exists where the middle term exists or the middle term exists only where the major term exists and that where the major is absent, the middle term is found to be invariably absent, the two terms can be regarded as invariably concomitant or connected by the relation of invariable concomitance (*avinābhāva-sambandha*). But perception alone cannot help us here to determine the connection between things belonging to these two classes at all places and at all times because empirical perception is confined to an object standing in close proximity to the sense-organs The later Naiyāyikas try to avert this difficulty by recognising a *sāmānya-lakṣaṇa pratyakṣa*, wherein a man perceiving with the sense-organ an individual object apprehends also the generality (*sāmānya*) of that object and through that all the objects falling under that class. Thus one can determine the connection between the objects of two

* Gaṅgeśa discusses at length about twenty definitions of *vyāpti* in his *Tattvacintāmaṇi*. He rejects all but one as too wide or too narrow and so on. The Navya-Naiyāyikas have contributed much to the understanding of *vyāpti* by their precise definition and exposition.

classes though one has not perceived all the objects of these two classes by the sense-organs. But this is not acceptable to all. Mental perception (*mānasa-pratyakṣa*) again is of no avail.[53] The mind though capable of cognising all possible objects is subject to the limitation that it can operate only in respect of the objects perceived by the senses Otherwise there would be no blind, deaf and the like persons as all could cognise everything with the mind. Nor can inference be of any help here as inference is itself based on the knowledge of *vyāpti* and so there would be mutual dependence (*anyonyāśraya*). And if a person had the mystic vision (*yogaja-pratyakṣa*) to apprehend the relation of universal concomitance between all things of the two classes, he would be an omniscient person and for him inference would not be necessary at all. Conceptual thinking (*vikalpa*) also cannot help as the Buddhists believe. If *nirvikalpa pratyakṣa* (indeterminate perception) being non-conceptual (*avikalpātmaka*) is not competent to know universal concomitance, *savikalpa pratyakṣa* also would not succeed in comprehending it as *vikalpa* has for its contents the same data as are perceived in indeterminate perception, only it arranges it in the empirical pattern set up giving it a location and a name.

The Naiyāyikas in order to strengthen their case regarding the certainty of the knowledge of universal concomitance (*vyāpti*) say that the cognition of *vyāpti* (e.g. wherever there is smoke there is fire) is acquired by perceptual cognition and it is tested by *tarka* (hypothetical reasoning or the method of reductio ad absurdum). The Jaina logicians, on the other hand, hold that the credit for the apprehension of *vyāpti* should be given to *tarka* alone. For instance, if smoke were present in the absence of fire, smoke would not be produced by fire; but the relation of cause-effect between fire-smoke is a well established fact, therefore there must be fire. This is how *tarka* apprehends *vyāpti*. The Jaina logicians, it may be noted, regard *ūha* or *tarka* (cogitation or hypothetical reasoning) as an independent *pramāṇa* (source of knowledge)[54]

Dharmakīrti states that experience, positive and negative can never produce a knowledge of the rule of invariable concomitance; there must be some laws such as those of identity (*svabhāva*, e.g. between *śiṁśapā* and tree), causality (*kāryakāraṇabhāva*, e.g between smoke and fire) and non-apprehension *anupalabdhi*) based on these.[55] The *Vaiśeṣika-sūtra* similarly enumerates the relations determining invariable concomitance between two things—causality, coherence in a common substrate, conjunction and opposition. There can be knowledge through an inferential mark (*liṅga*) where this *liṅga* is (*a*) effect of. (*b*) cause of, (*c*) conjoined with, (*d*) opposed to, (*e*) inherent in or along with the major term (*asyedaṁ kāryaṁ kāraṇaṁ saṁyogi virodhi samavāyi ceti laiṅgikam*—VS. 9.2.1; see also VS. 3.1.9–13). But it seems that even the Vaiśeṣikas dropped the idea of a fixed number of relations. We find Praśastapāda stating that if causality, etc. are mentioned by Kaṇāda, they are just by way of illustration and are not meant to give an exhaustive list, because experience shows that other relations are possible. For instance, when the *Adhvaryu* priest pronounces the syllable *Auṁ*, it is an indication that the *hotṛ* is present though he is not seen, the rising of the moon is a sign of the high tide in the sea and of the blooming of night-lotuses, the clearness of water in autumn is indicative of the rise of the constellation of Agastya. These and such other inferences are all justified and indicated by the expression '*asyedam*' in the *sūtra* which signifies mere relationship of universal concomitance.[56] Praśastapāda perhaps realised that perceptual experience could not by itself furnish a definitely fixed number of relations and many cases of inference would thus be precluded. He, therefore, seems to be supplementing the Vaiśeṣika notion of the *liṅga* and of the relations which provide the basis for inference to rest on *avinābhāva* or inseparable connection of characters and things The words of Praśastapāda are also an indirect indication, as Stcherbatsky[57] rightly points out, that at the time of Diṅnāga the question was already debated

whether there are any relations not traceable to causality. Though Diṅnāga had in his mind the relations which we find clearly stated in the works of Dharmakīrti, he was not sufficiently categorical in expressing these and it was left to Dharmakīrti to give this theory its final formulation by regarding identity, effect, and non-apprehension (based on these and leading to a negative conclusion) as constituting the form of the *liṅga* by which it leads to the inference of the probandum (See NyB., 2.12ff).

It may be noted here that the Buddhist logicians before Diṅnāga recognised different relations between the middle term and the major term just like those mentioned in the *Anuyogadvāra-sūtra*, 144 and in the *Vaiśeṣika-sūtra*. *Anumāna* is regarded in the *Yogacaryābhūmiśāstra* as of five kinds—(a) *nimitta-anumāna*, as of fire from smoke; it depends on the fact that the relation between the two was noticed before; (b) *svabhāva-anumāna*, inference from present perceived existence to unperceived existence (e.g from the present to the past), or from one part of an entity to the unperceived part (e.g. of a chariot from a part of it); (c) *karma-anumāna*, inference from an action of its basis or locus; for instance, we infer that a distant object is a man and not a post if we see it moving; (d) *dharma-anumāna*, inference from interrelated things, e g from birth to death from cranes to water;(e) *kārya-kāraṇa-anumāna*, inference based on causality (JRAS., July, 1929, p. 466).

Dharmakīrti's theory was critically examined by Vācaspati and others. They reject the view that all synthetic judgments are rooted in causality. Dharmakīrti's classification is according to them not exhaustive. Further, there cannot be any analytical judgment based on identity. When two conceptions are identical, one cannot be the reason for deducing the other; the deduction would be meaningless. If it be argued that the reality is the same, only the superimposed concepts are different, the realist answers that if the conceptions are

different, the corresponding realities also are different.* If the concepts are not real they could not be concepts. The judgment '*taru* is *vṛkṣa*' (where both terms mean 'tree') can be said to be founded on identity, but not the judgment '*Śiṁśapā* is tree', because *śiṁśapā* and tree are for the realist two different realities both cognised in experience which acquaints us with their invariable concomitance and the inherence of tree in the *śiṁśapā* (See NVTT., p. 163). Further, all real relations are not traceable to causality. There are numerous invariable concomitances ascertained by uncontradicted experience which cannot be reduced either to identity or to causation. For instance, the rising of the sun today is invariably connected with the rising of the sun yesterday, the rising of the moon is concomitant with high tide in the sea, the appearance of a lunar constellation is connected with the rise or disappearance of another constellation, and so on. Again, when we experience the flavour (*rasa*) of some thing we infer the presence of colour (*rūpa*) because we know that this kind of flavour is invariably concomitant with a particular colour. This invariable connection cannot be looked upon as rooted in causality as the Buddhists believe, because both phenomena are simultaneous whereas causality is a relation of necessary sequence. The Buddhist's answer to this is that all these relations are traceable to causality if rightly understood. Every instance of gustatory sense-datum (*rasa*) is dependent on the preceding complex of visual (*rūpa*), tactile (*sparśa*) and other data of which alone the thing consists The colour which exists simultaneously with the flavour is related to the latter only through the preceding moment in which visual, tactile and other sense-data represent that causal complex due to which the next point-instant of colour (*rūpa-kṣaṇa*) can arise. What the others calls a substance is for the Buddhist a complex of momentary sense-data. Thus the inference of colour (*rūpa*) through flavour (*rasa*) is really based on simultaneous production by a common causal complex. The

* This is in consonance with their respective theories of Reality.

immediately preceding point-instant of colour produces the succeeding point-instant of colour being its *samanantara-pratyaya* (immediately preceding and homogeneous condition) and it produces the succeeding moment of flavour being its auxiliary condition (*sahakāri pratyaya*). Every following point-instant arises, according to the Buddhist, in necessary dependence upon a complex of preceding point-instants. Everything is subject to this law of dependent origination (*pratītya-samutpāda*). Vācaspati appeals to common-sense here. Logic is not meant for critical philosophers alone, it is for the lay man as well. Ordinary men of the world having eyes of flesh (*piśita-cakṣuṣaḥ*) cannot discern the subtle difference between point-instants which alone are ultimately real according to the Buddhist philosophers. Nor is it permissible for critical philosophers to transcend the boundaries of experience and to change the nature of established phenomena according to their wanton ideas; if they were to do so, they would no longer be regarded as critical philosophers and could not arrive at the truth.[58] As to the Vaiśeṣika enumeration of relations—effect, cause, conjunction, inherence in one thing, opposition—, the term 'conjunction' or 'connection' alone suffices to include all cases Moreover a present thing alone can be opposed to another present thing, but things which are opposed to each other cannot serve as the *liṅga* of each other, they can only cancel each other (NVTT., p. 164). * Vācaspati concludes that what becomes the basis of inference is an invariable natural or unconditional connection between the middle and the major terms, irrespective of the relation that

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* This refutes also the seven relations mentioned by the Sāṁkhyas as the basis of inferences :

etenaiva

'mātrā-nimitta-saṁyogi-virodhi-sahacāribhiḥ;
svasvāmi-vadhyaghātādyaiḥ Sāṁkhyānāṁ saptadhā'numā.'

ity api parākṛtaṁ veditavyam.—NVTT., p. 165,

See *Sāṁkhya-vṛtti*, 5, and *Jayamaṅgalā*, 5, which mention *svasvāmisaṁbandha prakṛti-vikāra°*, *kārya-kāraṇa°*, *mātrā-mātrika°* (—*pātrapātrika°* n *Jayamaṅgalā*—), *pratidvandvi°*, *sāhacarya°*, *nimitta-naimittika°*.

subsists between them For instance, smoke and the like are naturally and invariably connected with fire, and the like; but fire and the like are not so connected with smoke and the like, because the connection of fire and the like with smoke and the like is brought about by adventitious conditions, moist fuel and the like. Hence smoke, etc. can be indicative of fire, etc. but not vice versa.[59] Thus *avinābhāva* or the invariable unconditional connection of things as determined by repeated and uncontradicted observation is, according to the Naiyāyikas, the only basis of the inference of the unknown from the known.

The element of probability would obviously loom large in inductive generalisations, as pointed out by the sceptical thinkers. One can never be sure when and where one's experience of this connection between two things would be contradicted, and one may not even come to know of it; further, one cannot be sure that the connection between two things is unconditional as the adventitious condition may be a common one and may be present in all the cases that have been observed. Further, if one observation be verified by another, this second would require to be further verified and so on ad infinitum, and we could never be quite sure of the truth of the knowledge of the connection of invariable concomitance we have arrived at. At a very early stage in the history of Indian logic the Lokāyatika who recognises only one *pramāṇa*, viz. perception (and a section of which does not recognise the validity of any *pramāṇa*—see Jayarāśi Bhaṭṭa's *Tattvopaplavasimha*) challenged the validity of inference as *vyāpti* could not be relied upon as its basis. If *vyāpti* were to be restricted to the known or observed particulars, it would be impossible to have any inference regarding unknown and unobserved particulars since the latter are different from the former; and if *vyāpti* were to refer to all conceivable particulars, unobserved as well as observed, all that had to

be known would be already known and nothing would remain to be known through inference. *

The Mīmāṁsakas of the Bhāṭṭa school maintain that *vyāpti* in the form of universal generalisation is not a necessary condition of inference. Fire is observed to be co-existent with smoke in two or three places and smoke is not seen to be present in a place where fire is not present. When one comes to have this experience repeatedly within the sphere of one's observation, one finds oneself in a position to determine the invariable connection between smoke and fire in the form in which they happen to be seen in the particular instances which have come within the scope of one's observation. When one later happens to see smoke in the same form in an unobserved place as in a place already observed, or even when one happens to see smoke again in the same form in an observed place as observed there, one's mind comes to have a knowledge of the presence of fire in that place where smoke is seen at the time. This knowledge is not of fire present to the senses, nor can it be regarded as a recollection of a past experience, since it has reference to the existence of fire at the time. Thus, according to the Bhāṭṭas, the proposition 'Wherever there is smoke there is fire' represents ordinarily a restricted form of synthesis which refers only to the observed particulars and is quite adequate as a ground of inference, and any one who has the knowledge embodied in this proposition would be able to infer fire on seeing smoke in any place, provided there is no suspicion of failure of this concomitance (*vyabhicāra*, that is to say, presence of the middle term, e.g. smoke in the absence of the major term, e.g. fire). All the same, the Bhāṭṭas do not deny that not infrequently in the course of inferential reasoning, one may arrive at universal generalisation of the type recognised by the

* This objection is embodied in a line which is quoted by several writers like Jayanta, Śālikanātha and others :

Viśeṣe'nugamābhāvāt sāmānye siddha-sādhanāt.—

NM. I, p. 108; See also *Tattvopaplavasiṁha*, pp. 7 -73.
For refutation of *anumāna*, see *Tattvopaplavasiṁha*, pp. 64ff.

Naiyāyikas, which has reference to the invariable concomitance between all cases of the middle term (*hetu*) and of the major term (*sādhya*), including observed and unobserved instances in the present, past and future. The Bhāṭṭas, however, insist that such universal generalisations are themselves cases of inference. Pārthasārathi Miśra explains the inferential process through which such universal generalisations are arrived at. In this connection a reference to Pārthasārathi Miśra's *Nyāyaratnamālā* (CSS, pp. 69-70) would show how unobserved places which have smoke may be inferred to have fire from the fact that smoke is predicated in these places on the basis of observed cases.

The Prābhākaras hold that *vyāpti* is the invariable connection between the middle and the major terms, which when it is made out, happens to be free from limitations of time and space and thus comes to assume the form of a universal generalisation. With the help of such a universal generalisation, when a person infers fire in a mountain on seeing smoke there, he is in fact cognising again what has already been cognised and forms part of the generalisation which he arrived at as a result of his observation. Inference involves merely the passing of the mind from a known object to something that is already known to be invariably connected with it. In the Prābhākara view, even a single observation (*sakṛd-darśana*) is enough for having a knowledge of *vyāpti*; repeated observation (*bhūyodarśana*) is, however, useful in showing that the connection observed between the middle and the major terms is not brought about by any adventitious condition (*upādhi*).[60] This is also the view of the Kevalādvaitins.

Thus, the Naiyāyikas and the Prābhākaras take this *vyāpti* to be of a general type having reference to all the conceived particulars unobserved and observed. The Bhaṭṭas on the other hand look upon it as a synthesis confined to the observed particulars which is arrived at through repeated cognition of their concomitance by sinking all differences as are due to merely spatial and temporal limitations. At times the *vyāpti* has reference to particular objects also; as for instance, the

perception of the rise of the constellation of Kṛttikā gives rise to the notion of the proximity of its neighbour constellation Rohiṇī.[61]

The Jaina logicians also have enumerated different relations at the root of invariable concomitance between the middle and the major terms. The middle term (*hetu*) can be identical with, the cause of, the effect of, inherent in the same locus as, and opposed to the major term (*sādhya*) (*Svabhāvaḥ kāraṇaṁ kāryam ekārthasamavāyi virodhi ceti pañcadhā sādhanam.*—PM. 1.2.12). In his *Vṛtti* on this *sūtra*, Hemacandra refutes the view that all these are included in the relations recognised by the Buddhists. Vādi Devasūri states that the middle term in positive inference can be less extensive than i.e. a determinate concomitant of, effect of, cause of, antecedent of, subsequent to, synchronous with, the major term; it can also be opposed (*viruddha*) to the major term.[62] Vādi Devasūri's list is very exhaustive. As a matter of fact his *pūrvacara* ('antecedent of'), *uttaracara* ('subsequent to') and *sahacara* ('synchronous with') would include all possible relations, yet he specifically mentions them, at the same time pointing out that the middle term may also be one which is less extensive than or is pervaded by (*vyāpya*) the major term

Invariable concomitance can thus be said to consist in the universal necessity of synchronous and successive occurrence of simultaneous and successive events. Or to be more technical, invariable concomitance consists in the occurrence necessarily of the more extensive (i.e. major term) on the occurrence of the less extensive (i e. middle term) or the occurrence of the middle term exclusively in the locus where the major term occurs. For instance, of such synchronous things, smoke is less extensive than fire, and *sattva* (existence) and *prameyatva* (knowability) are co-extensive; so also colour and flavour which are co-products of the same set of causal conditions. The appearance of Kṛttikā (Pleiades) and Śakaṭa (Rohiṇī) are successive events. If we know of the appearance of one we can infer the fact about the appearance of the other.[63]

We thus find in India a parallel to the discussion which so long occupied the field of logic and philosophy in Europe as to the problem of induction It can be said in general that when we infer from a fact that is known to another that is unknown, there must be some guarantee for this inference. The sole guarantee is the belief in the uniformity of nature constituted of uniformity of co-existence and uniformity of succession. In the latter, recourse is mostly had to the law of causality or of cause and effect to shorten the inquiry, though the Naiyāyikas emphatically say that it is only invariable unconditional uncontradicted connection that can determine the *vyāpti* of two things and not the relation of causality and the like. The Vaiśeṣikas, the Jainas and others hold that the effect can be inferred from the cause and vice versa. The Buddhist contention is that the effect cannot be inferred from the cause, as the effect may not arise if there is the absence of co-operative factors, or if there is any obstructive factor. Of course, the Vaiśeṣikas and others, who recognise the inference of the effect from the cause, would argue that what they mean by cause is the cause which is fully equipped for the production of the effect. But normally, the effect cannot be inferred with certainty from the cause.

Concluding we may say that valid reasoning is resorted to by the adherents of all schools of thought for establishing the existence of imperceptible entities such as the mental processes and the like of others,[64] and for establishing the truth of their own theories against the attacks of rival schools. Thinkers have argued and argued, and yet, as Bādarāyaṇa says, what one thinker establishes with the help of reasoning is set at nought by another who establishes another view which again is refuted by another and so on. This implies that the ultimate truth which can be only one is apprehended not by reasoning but by the intuitive vision, the eye of true wisdom (*prajñā*). Nevertheless, reasoning is the only intellectual mode of approaching truth and of direct intercommunication between persons at the empirical level. The 'nous' has

a partiality for truth, and the attempts at reasoning lead to the gradual sharpening of the intellect; if sincerely pursued reason would take us very near the grasp of the ultimate truth, though it may not actually acquaint us with the ultimate reality in respect of which the discursive reason has no scope. This explains why the schools of philosophical thought have given so much importance to dialectical criticism and have formulated their own rules of inference which are in consonance with their metaphysical views.

NOTES

1 Smṛtiḥ pratyakṣam aitihyam. anumāna-catuṣṭayam. etair āditya-maṇḍalam. sarvair eva vidhāsyate. -*Taittirīya Āraṇyaka* 1.2.

2 Dvidhā vā eṣa ātmānaṁ bibharty ayaṁ yaḥ prāṇo yaś cāsāv ādityaḥ. atha dvau vā etā asya panthānā antar bahiś ca. ahorātreṇaitau vyāvartete. asau vā ādityo bahirātmā. antarātmā prāṇaḥ. ato bahirātmakyā gatyā 'ntarātmano' numīyate gatiḥ. ity evaṁ hy āha. atha yaḥ kaścid vidvān apahatapāpmā' kṣādhyakṣo'vadātamanās tanniṣṭha āvṛttacakṣuḥ so antarātmakyā gatyā bahirātmano' numīyate gatiḥ. ity evaṁ hy āha. atha ya eṣo'ntarāditye hiraṇmayaḥ puruṣo yaḥ paśyatīmāṁ hiraṇyavasthāt sa eṣo'ntare hṛt-puṣkare evāśrito'nnam atti.—*Maitri* 6.1.

3 *Pratyakṣa* is mentioned in *Chāndogya Up.* 5.2.1, *Taittirīyaka Up.* 1.1. *Maitri* 6.22 mentions *upamā* but it cannot be definitely said whether it is mentioned as a source of knowledge—'Saptavidheyaṁ tasyopamā.'

Aitihyam anumānaṁ ca pratyakṣam api cā''gamaṁ,
ye hi samyak parīkṣante kutas teṣām abuddhitā.
—*Rāmāyaṇa* 5.87.23,

Pratyakṣaṁ cā' numānaṁ ca śāstraṁ ca vividhāgamaṁ,
trayaṁ suviditaṁ kāryaṁ dharma-śuddhim abhīpsatā.
—*Manu Smṛti*, 12.105.

4 After MBH II. 5.1 (not included in the Critical Edition).

5 Naiyāyikāḥ kathaṁ brūhi bhaviṣyanty anāgate.—LA, p. 25, v. 23. kathaṁ hi śudhyate tarkaḥ kathaṁ tarkaḥ pravartate—LA II. p. 24, v. 12; p. 33, v. 85, Ch. II, leaf 11, Asiatic Society of Bengal's MSS; Dṛṣṭānta-hetubhir yuktaḥ siddhānto deśanā katham. *Ibid*, p. 36-Buddhist

Text Society Edition. Kṛtakasya vināśaḥ syāt tārkikāṇām ayaṁ nayah. —*Ibid*, Ch. X, leaf 143, Asiatic Society of Bengal's MSS—as quoted in *History of Indian Logic*, p. 244—S.C. Vidyābhūṣaṇa.

6 Atha vā heū cauvvihe pannatte taṁ jahā-paccakkhe anumāne uvame āgame. atha vā heū cauvvihe pannatte taṁ jahā.-atthittaṁ atthi so heū, atthittaṁ ṇatthi so heū, ṇatthittaṁ atthi so heū, ṇatthittaṁ ṇatthi so heū.—*Sthānāṅga Sūtra*, 338.

Compare :

Sthānāṅga Sūtra	*Vaiśeṣika Sūtra*
(1) *Vidhi-vidhi*	*saṁyogi, samavāyi, ekārthasamavāyi*—3.1.9 *bhūto bhūtasya*—3.1.13.
(2) *vidhi-niṣedha*	*bhūtam abhūtasya*—3.1.12
(3) *niṣedha-vidhi*	*abhūtaṁ bhūtasya*—3.1.11
(4) *niṣedha-niṣedha*	*kāraṇābhāvāt kāryābhāvaḥ*—1.2 1.

7 Cauvvihe ṇāe pannatte taṁ jahā-āharaṇe āharaṇa-taddese āharaṇa-taddose uvaṇṇāso vaṇaye.—*Sthānāṅga Sūtra*, 338.

8 See Chapter XII on *Tarka*.

9. Dvividham eva khalu sarvaṁ sac cā'sac ca; tasya caturvidhā parīkṣā—āptopadeśaḥ, pratyakṣaṁ, anumānam, yuktiś ceti.—CS, *Sūtra-sthāna*, 11. 17.

Pratyakṣapūrvaṁ trividhaṁ trikālaṁ cā'numīyate,
vahnir nigūḍho dhūmena maithunaṁ garbhadarśanāt.
evaṁ vyavasyanty atītaṁ bījāt phalam anāgatam.
dṛṣṭvā bījāt phalaṁ jātam ihaiva sadṛśaṁ budhāḥ.
jala-karṣaṇa-bījartu-saṁyogāt sasya-sambhavaḥ,
yuktiḥ ṣaḍ-dhātusaṁyogād garbhāṇāṁ sambhavas tathā.
mathya-manthana (-ka)manthāna-saṁyogād agnisaṁbhavaḥ,
yuktiyuktā catuṣpādasampad vyādhi-nibarhaṇī.
buddhiḥ paśyati yā bhāvān bahukāraṇayogajān,
yuktis tri-kālā sā jñeyā trivargaḥ sādhyate yayā.—*Ibid* 21-25. Also—ata evānumīyate—yat svakṛtaṁ aparihāryam avināśi paurva-dehikaṁ daiva-saṁjñakam ānubandhikaṁ karma, tasyaitat phalam; itaś cā'nyad bhaviṣyatīti; phalād bījam anumīyate, phalaṁ ca bījāt.—*Ibid*, 31.

Athānumānam—anumānaṁ tarko yuktyapekṣaḥ, yathā—agniṁ jaraṇaśaktyā, balaṁ vyāyāmaśaktyā, śrotrādīni śabdādigrahaṇenety evamādi.—CS., *Vimānasthāna*, 8.40.

10 See *Indian Logic and Atomism*, pp. 86-87 (Oxford, 1921), *Indian Logic in the Early Schools*, p. 178—H. N. Randle (Oxford 1930) (Printed in India by the Government Press, Allahabad).

11 Viṣāṇī kakudmān prāntevāladhiḥ sāsnāvān iti gotve dṛṣṭaṁ liṅgam sparśaś ca vāyoḥ. na ca dṛṣṭānāṁ sparśa ity adṛṣṭa-liṅgo vāyuḥ.—VS. II. 1.8–10. Vāyu-sannikarṣe pratyakṣabhāvād dṛṣṭaṁ liṅgaṁ na vidyate. sāmānyatodṛṣṭāc cā'viśeṣaḥ. tasmād āgamikam —VS. II. 1.15—17. See also VS. III. 1.1–19; III. 2.6-8 Asyedaṁ kāryaṁ kāraṇaṁ saṁyogi virodhi samavāyi ceti laiṅgikam. asyedaṁ kāryakāraṇasambandhaś cāvayavād bhavati.—VS. IX. 2.1-2. hetur apadeśo liṅgaṁ pramāṇām karaṇam ity anarthāntaram.—VS. IX. 2-4.

12 Saṁyogi samavāyi ekārtha-samavāyi virodhi ca. kāryaṁ kāryāntarasya. virodhy abhūtaṁ bhūtasya. bhūtam abhūtasya. bhūto bhūtasya.—VS. III. 1.9–13(—text according to *Upaskāra*). The text according to Candrānanda is: saṁyogi samavāyy ekārtha–samavāyi virodhi ca. kāryaṁ kāryāntarasya kāraṇaṁ kāraṇāntarasya. virodhy abhūtaṁ bhūtasya, bhūtam abhūtasya, abhūtam abhūtasya, bhūtaṁ bhūtasya.—VS III. 1.8ff. See Candrānanda's commentary and Śaṅkara Miśra's *Upaskāra* on these *sū*

13 Compare VS. II. 1.9–17 with VS. II, 2.4–8. That these passages explicitly refer to each other is clear from III, 2.5. Both passages note that the conclusion is not specific *(aviśeṣa)* here.

14 Tat tu dvividham. dṛṣṭaṁ sāmānyatodṛṣṭaṁ ca. tatra dṛṣṭaṁ prasiddha-sādhyayor atyantajātyabhede' numānaṁ, yathā gavy eva sāsnā-mātram upalabhya deśāntare'pi sāsnāmātradarśanād gavi pratipattiḥ, prasiddha-sādhyayor atyanta-jātibhede liṅgānumeyadharma-sāmānyā-nuvṛttito 'numānaṁ sāmānyatodṛṣṭaṁ. yathā karṣaka-vaṇig-rājapuruṣāṇāṁ ca pravṛtteḥ phalavattvam upalabhya varṇāśramiṇām api dṛṣṭaṁ prayojanam anuddiśya pravartamānānāṁ phalānumānam iti.— PB., pp, 104-105.

15 See NV., p. 48.

16 (*a*) Sāmānyato–dṛṣṭaṁ—vrajyāpūrvakam anyatra dṛṣṭasyā'nyatra darśanam iti, tathā cā'dityasya tasmād asty apratyakṣā' py ādityasya vrajyeti.—NB. 1.1.5.

(*b*) Sāmānyato-dṛṣṭaṁ nāma akārya–kāraṇībhūtena yatrā'vinābhāvinā viśeṣaṇena viśeṣyamāṇo dharmī gamyate tat sāmānyato–dṛṣṭaṁ yathā balākayā salilānumānam. kathaṁ punar balākayā salilānumānam. yāvān asya deśo balākayā'jahadvṛttitvena prasiddho bhavati tāvantam antarbhāvya vṛkṣādikam arthaṁ pakṣīkṛtya salilavattvena sādhayati.—NV., p. 7. See also NV., p. 48.

(*c*) Sāmānyato–dṛṣṭodāharaṇaṁ bhāṣyakārīyaṁ duravabodhaṁ śeṣavad-udāharaṇāntargataṁ ca, atrā'pi kāryeṇa savitur deśāntara-prāptyā tat-kāraṇasya vrajyāyā anumānāt. na caitāvatā 'numānasya traividhyaṁ bhavati, udāharaṇamātrasyā''nantyenā''nantyaprasaṅgāt. tasmād Bhāṣyakāravyākhyānam arocayamāno Vārtikakāro'nyathā vyākhyāyo-

dāharaṇāntaram āha....hetu-viśiṣṭo hi dharmī gamakaḥ, jijñāsita-dharma-viśiṣṭaś ca gamyaḥ. yathā" huḥ,

"sa eva cobhayātmā' yaṁ gamyo gamaka iṣyate,
asiddhenaikadeśena gamyaḥ siddhena bodhakaḥ" iti.

avinābhāvitvaṁ svabhāva-pratibaddhatvaṁ sarveṣām eva hetūnāṁ sāmānyaṁ tatra dharma-dharminor abhedavivakṣayā hetur eva sāmānyam uktaḥ. sāmānyenā'vinābhāvinā hetunā lakṣitaṁ dṛṣṭam dharmirūpam anumānaṁ sāmānyato-dṛṣṭam anumānam. tṛtīyāyā tasiḥ. tadetat pūrvavac-cheṣavator api prāpakaṁ tatpada-sannidhānāt gobalīvardanyāyena te parityajyā'nyatra niviśate. tad idam uktam *akāryakāraṇabhūteneti.* udāharaṇam āha, yathā balākayeti. bhāṣyakārīyam udāharaṇam upanyaysā"kṣipati, apare punar iti.—NVTT., pp. 175-176.

17 *Indian Logic in the Early Schools*, pp. 152ff—H. N. Randle.

18 Idaṁ tu pariśeṣasyodāharaṁ nādaraṇīyaṁ, vyatirekiṇo hi nāmāntaram idaṁ pariśeṣa iti, eṣa punar anvaya-vyatirekī, dravya-karmānyatve sati sadādyabhedasya sapakṣe rūpādau sattvād vipakṣe sāmānyādāv abhāvāt, tasmād ātmatantratāsādhanam icchādīnāṁ pariśeṣodāharaṇaṁ draṣṭa-vyam.—NVTT., p. 183.

19 See '*Trividham Anumānam or a Study in Nyāya-sūtra*, 1.1.5' by A. B. Dhruva—Paper read at the First All India Oriental Conference, Poona, 1919. It may be noted that the word *nyāya* is used in the sense of general proposition in the *Ṛgveda Prātiśākhya*—'*nyāyamiśrān apavādān pratiyāt*' (*Paṭala* 1).

20 Sad-viṣayaṁ ca pratyakṣaṁ, sadasadviṣayaṁ cānumānam. kasmāt, traikālyagrahaṇāt. trikālayuktā arthā anumānena gṛhyante, bhaviṣyatīty anumīyate bhavatīti cābhūd iti ca, asac ca khalv atītam anāgataṁ ceti.—NB., 1.1.5. Compare *Jayamaṅgalā* on *Sāṁkhya-kārikā*, 5.

21. Māyā puttaṁ jahā naṭṭhaṁ juvāṇaṁ puṇarāgayaṁ.
kāī paccabhijāṇejjā puppaliṅgeṇa keṇaī.
taṁ jahā-khatteṇa vā vaṇṇeṇa vā laṁchaṇeṇa vā maseṇa vā tilaeṇa vā.
—*Anuyogadvāra Sū.*, 144.

22 The Buddhist logicians before Diṅnāga also recognise such relations as the basis of inference (see JRAS, p. 466, July, 1929).

23 Anumānaṁ trividhaṁ pūrvavat śeṣavat sāmānyato-dṛṣṭaṁ ca. yathā ṣaḍaṅguliṁ sapiḍakamūrdhānaṁ bālaṁ dṛṣṭvā paścād bahuśrutaṁ Devadattaṁ dṛṣṭvā ṣaḍaṅguli-smaraṇāt so'yam iti pūrvavat. śeṣavat yathā, sāgara-salilaṁ pītvā tallavaṇarasam anubhūya śeṣam api salilaṁ

tulyam eva lavaṇam iti. etac cheṣavad anumānam. sāmānyato-dṛṣṭaṁ yathā kaścid gacchaṁstaṁ deśaṁ prāpnoti. gagane'pi sūryācandramasau pūrvasyāṁ diśy uditau paścimāyāṁ ca'staṁ gatau. tac-ceṣṭāyām adṛṣṭāyām api tadgamanam anumīyate, etat sāmānyato-dṛṣṭam.—UH., pp. 13–14.

24 (a) Trividham it, anvayī vyatirekī anvaya-vyatirekī ceti. tatrānvaya-vyatirekī vivakṣita-tajjātīyopapattau vipakṣāvṛttiḥ yathā anityaḥ śabdaḥ sāmānya-viśeṣavattve saty asmadādibāhyakaraṇapratyakṣatvād ghaṭavad iti. anvayī vivakṣita-tajjātīyavṛttitve sati vipakṣahīno yathā sarvānityatva-vādinām anityaḥ śabdaḥ kṛtakatvād iti. asya hi vipakṣo nāsti. vyatirekī vivakṣitavyāpakatve sati sapakṣābhāve sati vipakṣāvṛttiḥ. yathā nedaṁ jīvaccharīraṁ nirātmakaṁ aprāṇādimattvaprasaṅgād iti.—NV., p. 46.

(b) Svamate tv abhidheyo viśeṣaḥ prameyatvāt sāmānyavat, paramāṇvākāśādayaḥ kasyacit pratyakṣāḥ prameyatvād ghaṭavad ityādayo draṣṭavyāḥ.—NVΓT., p. 173.

(c) Atha vā trividham iti liṅgasya prasiddha-sad-asandigdhatām āha. prasiddham iti pakṣe vyāpakaṁ sad iti sajātīye'sti, asandigham iti sajātīyāvinābhāvi.—NV., p. 49.

25 Vividhena prakāreṇa itaḥ prāpto vītaḥ, pakṣa-vyāpakatve sati sapakṣa-vyāptyā'vyāptyā ca, tasmād anyo'vīta iti.—NVTT., p. 282. See NV., p. 123.

26 See Appendix 7, p. 218, *Vaiśeṣika-Sūtra* with Candrānanda's commentary Jambuvijayajī, GOS, 1961.

27 Tad anumānaṁ liṅgapūrvakaṁ yatra liṅgī anumīyate yathā daṇḍena yatiḥ. liṅgi-pūrvakaṁ ca yatra liṅginā liṅgam anumīyate yathā dṛṣṭvā yatim asyedaṁ tridaṇḍam iti—Gauḍapāda on SK., 5.

28 See Appendix 7, p. 215, *Vaiśeṣika Sūtra* with the commentary of Candrānanda—Jambuvijayajī (GOS., 1961).

29 Anyat sāmānyalakṣaṇam. so'numānasya viṣayaḥ—NyB. 1.16–17; Tatra yo'rtho dṛṣṭatvena jñātaḥ, sa pratyakṣeṇa pravṛtti-viṣayīkṛtaḥ. yasmād yasminnarthe pratyakṣasya sākṣātkārivyāpāro vikalpenānugamyate tasya pradarśakaṁ pratykṣaṁ, tasmād dṛṣṭatayā jñātaḥ pratyakṣa-darśitaḥ. anumānaṁ tu liṅga-darśanān niścinvat pravṛttiviṣayaṁ darśayati. yathā, ca pratyakṣaṁ pratibhāsamānaṁ niyatam arthaṁ darśayati anumānaṁ ca liṅga-sambaddhaṁ niyatam arthaṁ darśayati. ata ete niyatasyā'rthasya pradarśake. tena te pramāṇe.—NyBT. 1.1. See also *Pramāṇa-vārttika* II. 1.755ff and *Manorathanandinī*.

30 sādhyāvinābhuno liṅgāt sādhyaniścāyakaṁ smṛtam;
anumānaṁ tad abhrāntaṁ pramāṇatvāt samakṣavat.
—NyA, 5; sādhanāt sādhyavijñānam.—PMS, 3.14, See also NyV., 2.170; *Laghīyastraya*, IIff; TŚlv., p. 107, st, 120; PM., 1.2.7,

31 Tatpūrvakam ity anena liṅga-liṅginoḥ sambandha-darśanaṁ cā'bhisambadhyate. liṅga-liṅginoḥ sambaddhayor darśanena liṅga-smṛtir abhisambadhyate. Smṛtyā liṅga-darśanena cā'pratyakṣo'rtho'numīyate.—N.B., 1.1.5.

32 Eke tāvad varṇayanti liṅga-liṅgi-sambandha-smṛtir anumānam iti, itarair liṅga-liṅgi-sambandha-darśanādibhir anugṛhyamāṇā. apare tu manyante liṅga-parāmarśo'numānam iti. vayaṁ tu paśyāmaḥ. sarvam anumānam anumites tannāntarīyakatvāt.pradhānopasarjanatāvivakṣāyāṁ liṅga-parāmarśa iti nyāyyam. kaḥ punar atra nyāyaḥ ? ānantarya-pratipattiḥ. yasmāl liṅga-parāmarśād anantaraṁ śeṣārtha-pratipattir iti. tasmāl liṅga-parāmarśo nyāyya iti. smṛtir na pradhānam. kiṁ kāraṇam? smṛtyanantaram apratipatteḥ. na hi bhavati yatra dhūmam adrākṣaṁ tatrā' gnim adrākṣaṁ iti. etasyāś ca smṛter anantaram tasmād agnir iti śeṣārthagraha iti yuktaṁ vaktum. tasmāt smṛtyanugṛhīto liṅga-parāmarś-bhīṣṭārtha-pratipādako bhavatīti. evaṁ copanayasyā'rthavattā.—NV...rṇaṁ

33 Vidhis tu yatra dhūmas tatra agnir agnyabhāve dhumo'pi n... ...ṁ pākaṁ evaṁ prasiddha-samayasyā' sandigdha-dhūma-darśan... ...n jinās tu nusmaraṇāt tadanantaram agnyadhyavasāyo bhavatīti ...a); also Nyāya-kandali, p. 206 (Benares, 1895). ...armaḥ(—nigamana).

34 See NV., pp. 50-51; NVTT., pp. 180-182.

35 For details regarding the nature of 27, also NyBT., 3.123. Fragments from Diṅnāga'——Tucci ...ca svayaṁ vā pratītam anumānasya of Great Britain and Ireland— ...ātipāditaṁ, tasmāt liṅgasya svarūpaṁ Kumārila raises also the que... ...ca śabdaḥ. tatra svarūpaṁ svārthānumāne by fire ('The hill is fiery')... ...ḥ śabda iha vyākhyeyaḥ. tataḥ pratipādakaṁ in the hill. Randle h... ...yaṁ darśayannanumāna-śabdenoktavān Ācarya iti in his 'Indian Logi... ...ST., 3.2.

36 See NV., pp... vākyena svaniścitārthapratipādanaṁ parāthānumānam. pravesa, ...13, parārthānumānaṁ tat pakṣādivacanātmakam.—NyA., 13,

37 Yad...-liṅgākhyānaṁ parārthānumānaṁ, kāraṇe kāryopacārāt.—NyB., ...-2.

See NM., I, p. 111.

Upalambhānupalambhanimittaṁ vyāptijñānam ūhaḥ. idam asmin saty eva bhavati asati tu na bhavaty eveti vā. yathā' gnāv eva dhūmas tadabhāve na bhavaty eveti ca.—PMS., 3.11-13; also PNTL., 3.7-8, PM., 1.2.5-6; sahakramabhāvinoḥ sahakramabhāvaniyamo'vinābhāvaḥ. ūhāt tanniścayaḥ.—PM., 1.2.10-11. See also TŚlv., pp. 194-197 and SV., 3.8. Tikā.

55 Kāryakāraṇabhāvād vā svabhāvād vā niyāmakāt,
avinābhāvaniyamo' darśanān na na darśanāt.
—*Pramāṇa Vārttika*., 3.30.
anvaya-vyatirekād yo yasya dṛṣṭo' nuvartakah,
svabhāvas tasya taddhetur ato bhinnān na sambhavaḥ.
—*Ibid* 3.37. See also NyB., 2.12ff; NVTT., p. 158.

56. Evaṁ sarvatra deśakālāvinābhūtam itarasya liṅgam. śāstre kāryādi-grahaṇaṁ nidarśanārthaṁ kṛtaṁ nāvadhāraṇārtham. kasmāt, vyatireka-darśanāt. tad yathā adhvaryur oṁ śrāvayan vyavahitasya hotur liṅgaṁ, candrodayaḥ samudra-vṛddheḥ kumudavikāśasya ca, śaradi jalaprasādo'-gastyodayasyeti evamādi tat sarvaṁ asyedam iti sambandha-mātravacanāt siddham.—PB, 103-104.

57 *Buddhist Logic*, Vol. I, p. 268.

58 See NVTT., 158ff.

Tathā ca rasāt kāryāt tatkāraṇaṁ rūpam anumātavyaṁ taśat cānumitād rūpāt kāraṇāt tatkāryaṁ rasa-samānakālaṁ rūpam anumātavyaṁ, tathā ca kāraṇāt kāryānumānaṁ tādātmya-tadutpattibhyāṁ anyad iti nā'bhyām eva pratibandhasiddhiḥ. laukikānāṁ caitad rasād rūpānumānam. na caite piśita-cakṣuṣaḥ kṣaṇānām anyonyabhedam adhyavasyanti. na cā'nadhyavasyantaḥ pravṛttarūpotpādanasāmarthyaṁ rasahetuṁ rūpam anumātum utsahante. na ca svalakṣaṇānurodhena lakṣyasyā'nyathākaraṇaṁ yuktaṁ parīkṣya-kāriṇām atipatita-lokamaryādānāṁ teṣām tattvānupapatteḥ. yathā" huḥ—
"siddhānugamamātrāṁ ca kartuṁ yuktaṁ parīkṣakaiḥ,
na sarvalokasiddhasya lakṣaṇena nivartanam" iti.

59 Tasmād yo vā sa vā' stu sambandhaḥ, kevalaṁ yasyā' sau svābhāviko niyataḥ sa eva gamako gamyaś cetaraḥ sambandhīti yujyate. tathā hi dhūmādīnāṁ vahnyādi-sambandhaḥ svābhāvikaḥ. na tu vahnyādīnāṁ dhūmadibhiḥ. te hi vinā'pi dhūmādibhir upalabhyante, yadā tv ārdrendha-nādi-sambandham anubhavanti tadā dhūmādibhiḥ saha sambadhyante. tasmād vahnyādīnām ārdrendhanādyupādhikṛtaḥ sambandho na svābhāvikaḥ, tato na niyataḥ. svābhāvikas tu dhūmādīnāṁ vahnyādibhiḥ sambandha upādher anupalabhyamānatvāt kvacid vyabhicārasyā'darśanād anupalabhyamānasyā'pi kalpanā'nupapatteḥ, ato niyataḥ sambandho'-numānāṅgam.—NVTT., p. 165.

60 I am indebted to the exposition of the concept of *vyāpti* in the Mīmāṁsa school in '*A Primer of Indian Logic*', pp. 207-211—Kuppusvāmī Śāstri (Madras)

61 Bhūyodarśanagamyā hi vyāptiḥ sāmānyadharmayoḥ,
jñāyate bhedahānena kvacic cā'pi viśeṣayoḥ.
kṛttikodayam ālakṣya rohiṇyāsattikḷptivat,
vyāpteś ca dṛśyamānāyāḥ kaścid dharmaḥ prayojakaḥ.
—Ślv. *Anumāna*, 12-13.

62 Uktalakṣaṇo hetur dviprakāra upalabdhyanupalabdhibhyāṁ bhidyamānatvāt. 49. upalabdher api dvaividhyam aviruddhopalabdhir viruddhopalabdhiś ca. 62. tatrā'viruddhopalabdhir vidhisiddhau ṣoḍhā, 63. sādhyenā'viruddhānāṁ vyāpya-kārya-kāraṇa-pūrvacarottaracara-sahacarāṇāṁ upalabdhiḥ, 64.—PNLT, III. Akalaṅka also recognises all these relations. —See *Siddhiviniścayavṛtti*, 6.9-16.

63 Sahakramabhāvinoḥ sahakramabhāvaniyamo'vinābhāvaḥ.—PM., 1.2-10; vyāptir vyāpakasya vyāpye sati bhāva eva vyāpyasya vā tatraiva bhāvaḥ. —PM., 1.2.6, also—Sādhyā' vinābhāvitvena niścito hetuḥ. sahakramabhāvaniyamo'vinābhāvaḥ. sahacāriṇoḥ vyāpya-vyāpakayoś ca sahabhāvaḥ. pūrvottaracāriṇoḥ kārya-kāraṇayoś ca kramabhāvaḥ.—PMS., 3.15-18.

64 Nānumānaṁ pramāṇam iti vadatā lokāyatikenā'pratipannaḥ sandigdho viparyasto vā puruṣaḥ kathaṁ pratipadyeta? na ca puruṣāntaragatā ajñāna-sandeha-viparyayāḥ śakyāḥ arvāgdṛśā pratyakṣeṇa pratipattuṁ nāpi mānāntareṇa, anabhyupagamāt. anavadhṛtā'jñāna-saṁśaya-viparyāsas tu yaṁ kaṁcit puruṣaṁ prati pravartamāno'navadheyavacanatayā prekṣāvadbhir unmattavad upekṣyate, tad anenā'jñānādayaḥ parapuruṣavartino'bhiprāyabhedād vacanabhedād vā liṅgād anumātavyāḥ, ity akāmenā'py anumānaṁ pramāṇam abhyupeyam.—Vācaspati's *Tattvakaumudi* on *Sāṁkhya Kārikā*, 5.

CHAPTER 11

OTHER *PRAMĀNAS*

Western Philosophy generally recognises two sources of knowledge—perception and inference. But Indian Philosophy presents a variety of opinions in this matter. The various *pramāṇas* (independent sources of valid cognition) recognised by the different schools are stated by Varadarāja in his *Tārkika-rakṣā*. The Cārvākas admit Perception (*pratyakṣa*) alone; the Bauddhas and the Vaiśeṣikas recognise Perception and Inference (*anumāna*); the Sāṁkhyas recognise Verbal Testimony (*śabda*) besides these, and one school of Nyāya agrees with them in recognising only these three. (Most of the Vedāntins also admit these three *pramāṇas*). Other schools of Nyāya add Comparison or Analogy (*upamāna*) as a fourth source of knowledge. The Prābhākaras among the Mīmāṁsakas recognise these four along with Implication or Presumption (*arthāpatti*) as a fifth: the Pūrva-Mīmāṁsakas and the (Kevalādvaitin) Vedāntins admit Non-apprehension or Negation (*anupalabdhi* or *abhāva*) as a sixth in addition to these. The Paurāṇikas add Inclusion (*sambhava*) and Tradition (*aitihya*) to these.[1] Gesture (*ceṣṭā*) also is regarded as a distinct *pramāṇa* by some—the Tāntrikas.

Jaina logicians classify valid knowledge as *pratyakṣa* (direct) and *parokṣa* (indirect), all the empirical sources of knowledge including sense-perception and scriptural knowledge being included under the latter. *Pratyakṣa* includes *avadhi* (intuition by the soul of all things having shape and form irrespective of consideration of space and time), *manaḥparyāya* (intuition of mental modes or of the objects in the thoughts of others), and *kevala-jñāna* (omniscience). These three are regarded as *pratyakṣa* (direct) as the soul perceives them directly, i.e.

independently of the sense-organs. But in order to keep pace with other logicians according to whom *pratyakṣa* is sensuous knowledge and to form a common terminology for purposes of discussion with the adherents of other schools, Jaina logicians felt the need to style knowledge emerging in association with the sense-organs also as *pratyakṣa* (see *Nandī Sūtra* 3-5; *Anuyogadvāra*, 144). Jinabhadra styles sensuous knowledge *saṁvyavahāra-pratyakṣa* (empirical perception) (*Viśeṣāvaśyaka-bhāṣya*, 95; see also *Pramāṇa-Mīmāṁsā* 1.1.20). *Parokṣa*, from this point of view, is said to be of five kinds—*smṛti* (memory), *pratyabhijñā* (recognition), *tarka* (argument confirming the relation of invariable concomitance), *anumāna* (inference), *āgama* (testimony) (—see PMS. 3.2; PM. 1.2.2). *Pratyabhijñā* is a very wide term and includes the *upamāna* of Brahmanical systems.

The Sanskrit word '*jñāna*' stands for all kinds of cognitions whether true or false; and the word '*pramā*' is used to designate only a true cognition (*yathārtha-jñāna*) as distinct from a false one (*mithyā-jñāna*), though it means much more in the view of many schools of philosophy. Ordinarily when we use the word *jñāna*, knowledge, it carries with it the feeling that it is right knowledge; so knowledge that proves wrong has to be designated distinctly as *mithyā-jñāna*, false knowledge, and as a consequence of this distinction one has to designate knowledge that is true s *samyag* or *yathārtha jñāna*, true knowledge. Accordingly, the word '*jñāna*' is used here to convey the idea of just cognition, '*samyag* or *yathārtha jñāna*' that of true cognition or knowledge, and '*mithyā-jñāna*' that of false cognition or knowledge. '*Pramā*' signifies cognition having the two-fold characteristics of truth and novelty (*yathārthatva* or *abādhitatva* and *anadhigatatva*). We shall consider the different theories of truth and validity in a later chapter. It may be observed that most of the schools of Indian philosophy admit three types of truth—one empirically justifiable, a second philosophically justifiable and the third seeking consistency with intuition or revelation.

The Indian philosophers claim to establish their metaphysical categories on the strength of their *pramāṇas* (*prameya-siddhiḥ pramāṇāddhi; pramāṇādhīnā prameya-vyavasthitiḥ*). Every school of philosophy, except that of the sceptics, has at the very outset stated the *pramāṇas* (sources of valid knowledge) acceptable to it, within the framework of which it proposes to evolve and demonstrate its tenets. But *pramāṇa* (valid knowledge and source of valid knowledge) as an object of examination is itself a *prameya* (knowable), so the definition and criterion of reality arrived at would apply to it also. It would, therefore, be rash and hazardous to pass a general judgment on the question of the relation of metaphysics, or rather ontology, and epistemology. All that can be said is that the Indian thinkers have attempted a harmony and congruence between their epistemological and metaphysical views and theories. The Buddhists, the Jainas, the Prābhākaras and the Vedāntins accept that knowledge is self-manifest or self-luminous (*svaprakāśa*) and one becomes aware of knowledge along with the object that is known. The idealistic Buddhists go ahead and argue out a case for identity of existence from simultaneity of awareness. The Naiyāyikas, on the other hand, hold that it is not a fact that knowledge carries with it its own awareness; it is only by an act of reflection or introspection at a subsequent moment (*anuvyavasāya*, e.g. 'I know the jar'), that we become aware of the knowledge of the jar. The Bhāṭṭas are of the view that knowledge is never immediately known either at the time when the object is known or at any subsequent moment of reflection. Knowledge is known through inference from the quality of knownness (*jñātatā*) that is found to exist in the object in such an experience as 'The jar is known'. The question of the validity of knowledge—whether it is intrinsic or extrinsic—will be discussed later.

Pratyakṣa (Perception)—Modern logic generally treats perception as a topic in psychology, but Indian logic treats it from the point of view of both its descriptive as well as its normative aspects. In modern logic also in its inductive part,

the validity of observation and experimentation plays a central role. Indian logic regards perception as the primary, and so an important, source of knowledge, and every school of philosophy has its own theory of perception which is thoroughly consistent with its metaphysical position.

As regards the exact definition of *pratyakṣa* there is a marked difference of opinion among the different schools of philosophy. We may broadly classify these views into three types : The large majority of views considers perception as knowledge arising out of the contact of sense with an object ('*prati*'—to, before, near, and '*akṣa*', sense-organ). According to the Buddhists, perception is an unerring knowledge of the unique particular or unerroneous knowledge, devoid of conceptualisation (*kalpanāpoḍham abhrāntam*). The Prābhākaras, the Vedāntins and also a section of the Naiyāyikas (—see *Tattva-cintāmaṇi*—) characterise perception as immediate knowledge (*sākṣāt-pratītiḥ*).

According to the Buddhistic view, the word '*pratyakṣa*' is strictly confined to the knowledge of the unique particular object (*svalakṣaṇa*) that is given directly through the sense-organ. The name, class-character, etc. through which we generally interpret the particular or rather the situation should not be included in perception as they are supplied by our *kalpanā* (imagination). The main objection against this view is that this perceptual knowledge is as good as a non-entity (*asatkalpa*) and cannot therefore be considered to be perception or even a piece of knowledge. Even the Buddhists regard it as a *pramāṇa* only when it gives rise to *vikalpa* or conceptual knowledge, judgment Thus, this theory of perception is in complete harmony with the peculiar metaphysics of the Buddhists according to which the unique momentary particulars alone are real. This view of perception gave a rude shock to the views of other schools and at least drew their attention to the fact of *nirvikalpa pratyakṣa* (indeterminate perception) as preceding *savikalpa pratyakṣa* (determinate perception).

Gautama, Kaṇāda, Śabara, Kumārila and a great majority of thinkers agree that *pratyakṣa* is knowledge derived from the contact of sense with an object (*indriyārtha-sannikarṣa-janyam*), though there may be difference in their views as to how the sense-object contact is established and so on.[2]

This view is considered to be unsatisfactory by a third class of thinkers, of whom Gaṅgeśa, the Prābhākara school of Mīmāṁsakas and the Kevalādvaitins are the most prominent. Gaṅgeśa's contention is that the definition of *pratyakṣa* as knowledge obtained directly through the contact of a sense with an object is too wide as this would apply even to the cases of inference and memory, in both of which the mind, an internal sense-organ, is at work. Gaṅgeśa therefore defines perception as immediate knowledge or negatively as knowledge that is not derived through the active agency of another knowledge (*jñānākaraṇakaṁ jñānam*). The Prābhākara school also defines perception as immediate knowledge—*sākṣāt pratītiḥ pratyakṣam.* These thinkers, whatever their view, hold the activity of some sense-organ (external or internal) to be responsible for perception. But the Advaitins do not admit any necessary connection between perception and the activity of the sense-organ. God has no sense-organs and yet has immediate knowledge of things. According to some Advaitins who do not consider mind to be a sense-organ, we have in internal perception (of pleasure, pain etc) another instance of immediate knowledge independent of the the sense-activity. They, therefore, define perception as immediate consciousness[3] The Jain logicians also agree when they define perception as clear or lucid (*spaṣṭa or viśada*) consciousness.[4] Initially they confined the word '*pratyakṣa*' to the knowledge acquired by the soul directly, without the aid of the senses. A special feature of the theory of perception among Indian logicians is the recognition of intuition or super-sensuous direct knowledge as a type of *pratyakṣa* whether it be *Īśvara pratyakṣa* (God's intuition) or *yogi-pratyakṣa* (yogic perception).

Indian logic does not end merely with empirical experience and inference based on it. The Indian thinkers recognised *anubhava*, or intuitional experience as a *pramāṇa* in their scheme of *pramāṇas* along with sensuous empirical experience and the reasoning based on it. In the western systems of thought this type of knowledge has been excluded from logic and put into the category of revelation which is supposed to be the source of religious truth. In the scheme of thought of the ancient thinkers of India both these aspects of the human mind were somehow kept together even when they were aware of the difference between these two types of experience and knowledge. It may be observed that the justification for finding a place for *āgama* or *śabda pramāṇa* lies in this, inasmuch as the scriptures are believed to be expressions of such intuitive experience, and therefore empirical experience and reasoned out inference are viewed in consistency with it.

The Naiyāyikas recognise three kinds of *alaukika* or extra-ordinary perception—*sāmānya-lakṣaṇa*, *jñāna-lakṣaṇa* and *yogi-pratyakṣa*. (a) *Sāmānya-lakṣaṇa*—We perceive not only a *vyakti* or individual, but also the universal (*sāmānya*) as characterising that particular individual, and this amounts to the perception of all things of that class possessing this class-characteristic. This accounts for the knowledge of *vyāpti* (universal concomitance) even though all the individuals of the two classes are not perceived in the normal way. In perceiving a particular, we virtually perceive all individuals of that class, through the perceptual knowledge of the universal. The perceptual knowledge of the universal does the duty of sense-contact in causing the immediate knowledge of the things of that class. (b) *Jñāna-lakṣaṇa* explains the immediate knowledge of objects not presented to the sense-organs. For instance, on seeing a piece of sandal-wood at a distance, we feel that there is a piece of fragrant sandal-wood even though we do not actually smell the fragrance. Our previous knowledge that sandal-wood is fragrant, causes the presentation of the fragrance when the sandle-wood is presented to vision. This

previous knowledge officiates there for sense-contact in causing the immediacy of the object[5] The perception of illusory objects also can be explained by this theory of *jñāna-lakṣaṇa*. (*c*) The third kind of extra-ordinary perception is *yogi-pratyakṣa*. The Naiyāyikas and some other thinkers believe that through meditation and concentration a yogin can acquire the supernatural faculty of perceiving all things concealed, distant and infinitely small.[6]

In Indian philosophy two kinds or stages of perception have generally been distinguished--*nirvikalpa* (indeterminate) and *savikalpa* (determinate). The Naiyāyikas, * the Vaiśeṣikas, and the Mīmāṁsakas hold that when perception takes place, at the very first moment, we do not grasp the full object, characterised by quality, universal, relation, etc. but, we perceive the uncharacterised (*niṣprakāraka*) object as it is by itself. So in this primary stage, *pratyakṣa* is to be regarded as *nirvikalpa* or undifferentiated. When the undifferentiated sensum is differentiated and constituents of it interrelated through the attribution of a universal, a quality, relation, etc. we have what may be called *savikalpa* (differentiated or determinate) perception. The existence of *nirvikalpa pratyakṣa* is not directly experienced, but it can be logically proved to exist as a necessary presupposition of our determinate perceptual knowledge of the object. The determinate perceptual knowledge in which something is perceived as a jar or as of a black colour and so on, implies that we ascribe to a presented fact the attributes, class-character jarness, colour, etc. But this attribution cannot take place before the fact attributed is itself perceived. It may, therefore, be assumed that prior to the attribution of these, these must be perceived, and so prior to the determinate perception of the jar we must have a *nirvikalpa* or an undifferentiated state of knowledge. The contention of the grammarians is that since language enters into the very texture of all kinds

* There is reason to believe that the Naiyāyias recognised this clear-cut distinction only when Vācaspati introduced it taking the clue from his preceptor Trlocana. (See NVTT. 1, 1.4)

of knowledge without exception, all knowledge is determinate. The Mīmāṁsakas refuting this say that there does exist a preliminary indeterminate knowledge in which neither any particularity nor any generality is perceived; the individual is then known alone (*Śloka-vārttika—Pratyaṣa-sūtra,* 112) Pārthasārathi Miśra, clarifying this in his *Śāstra-dīpikā* (p. 41) says that in the *nirvikalpa* stage, the object is nebulous (*mugdha*) and multiform (*anekākāra*), whereas in the *savikalpa* stage it becomes definite and presents only one form. The Buddhists not only admit the existence of *nirvikalpa pratyakṣa,* but assert that it is the only kind of *pratyakṣa* or direct knowledge that we really possess. In the succeeding stage of *savikalpa jñāna* we supply from our mind or imagination name, universal etc., which should not therefore be mistaken either as existing in the object or as being immediately known. The Naiyāyikas and others on the contrary maintain that the substance, qualities, universals, etc. are all present in the *nirvikalpa* stage as in the *savikalpa*, yet they appear discrete and isolated in the former, whereas they are inter-related in the substantive-qualifier (*viśeṣya-viśeṣaṇa*) way in the latter. The Naiyāyikas do not regard *nirvikalpa pratyakṣa* as either *pramā* or *apramā;* no error is possible in this stage as error results only from the wrong relation and wrong attribution of the content of knowledge, though the knowledge of the things by themselves is right. The error lies not in the presentations concerned in the perception, but in the determination of one perception by another brought about by association. Diṅnāga seems to have omitted the word '*abhrānta*' (non-erroneous) from the definition of *pratyakṣa* on account of this reason, whereas Dharmakīrti and others hold that illusion can occur on account of objective factors such as defects in the sense organs, distance and the like and are not merely subjective and so include the term '*abhrānta*' again in the definition of *pratyakṣa* (See *Tattva-saṅgraha,* 1312–1314; also *Pañjikā,* p. 394).

According to the Kevalādvaitins, not only pre-judgment perception but also all identity judgments 'This is that Devadatta, 'That thou art' (*So' yaṁ Devadattaḥ, Tat tvam asi*) are *nirvikalpa*, though they can be expressed in language. According to Rāmānuja, *nirvikalpa pratyakṣa* is not determinate in character. but is perception of the very first object of a class that one comes across, when it is not compared and classified with other objects of that class. The perceptual cognition of other things of the same class is determinate in character. According to the Jaina logicians, *darśana* is the indistinct cognition of the mere existence (*sattā*) of a thing and is not regarded as a *pramāṇa*. *Mati* or perceptual knowledge is analysed into four stages—*avagraha* (perception, which somewhat corresponds to *nirvikalpa pratyakṣa*), *īhā* (urge to know further), *apāya* (perceptual judgement) and *dhāraṇā* (retention of the judgement which results after the object with its particulars is definitely ascertained, and is capable of rousing memory).[7]

The different schools of philosophy have put forth their own theories of error as well as of truth. The *anyathākhyāti* of the Naiyāyikas (also the *viparītakhyāti* of the Bhāṭṭas and the Jainas), the *akhyāti* of the Prābhākaras, the *anirvacanīya-khyāti* of the Kevalādvaitins, the *ātmakhyāti* of the Vijñāna-vādins and the *asatkhyāti* of the Mādhyamikas are notable instances in point.

According to the Naiyāyikas and the Vaiśeṣikas, when a piece of shell is wrongly cognised as silver, nothing is wrong with the object itself. There is again no error in the undifferentiated or indeterminate perception (*nirvikalpa pratyakṣa*) of the object in which brightness, etc. are perceived in an undifferentiated way. But on account of certain defects in the sense-organs and the influence of memory, etc. the shell is cognised as silver in the *savikalpa* or differentiated or determinate perception. According to the modern Naiyāyikas, the error lies not in the presentations concerned, but in the determination of one perception by another due to a *jñāna-*

lakṣaṇa-sannikarṣa (cognitional contact) (with silver, for instance). This determination results in the cognition of an object as something other than what it is, and hence the Nyāya theory is called *anyathā-khyāti*. The Bhāṭṭa theory is called *viparīta-khyāti* as according to the Bhāṭṭas, the attribute of one thing is determined in respect of another due to some defect. For instance, the yellowness of bile is related to the shell and we have the erroneous perception of yellow shell. According to the *viparītakhyāti* of the Jainas, on account of defects in association with past impressions roused by similarity, the consciousness of silver (–to take an instance–) which has been apprehended in the past arises in respect of the object, nacre before the eyes. The view of the Prābhākara Mīmāṁsakas is that error results from the failure to distinguish between two perceptions or between memory and perception or between two remembrances and the like, and hence their theory is called *vivekākhyāti* or *akhyāti* The white shell, for instance, appears as yellow as a result of jaundice, the cognition being a blending of the apprehension of shell without colour and that of the yellowness of the bile in the eye perceived without the substrate. It can be seen that these theories of the realistic schools leave the reality of the actual objects concerned unaffected, whether they be nacre and silver, or shell and yellow colour or the like.

According to the *anirvacanīya-khyāti* of the Kevalādvaitins, in an illusion e g. of silver in nacre, the nature of the nacre is obscured and an indefinable (*anirvacanīya*) silver is created by *Avidyā* aided by the memory of silver, the *doṣa* of the eyes and the like. It may be observed here that according to these philosophers, the indefinable world of appearance also is a creation of *Avidyā*. The Sautrāntikas and the Vijñānavādins hold that the silver appears externally due to the *vāsanā* (residual impression or memory–trace) of silver which arises in a beginningless series being produced by an earlier idea of silver and that by an earlier *vāsanā* due to a yet earlier idea and

so on. The idea of silver is a result of a beginningless series of *vāsanās* and it is due to the latter that it appears to consciousness as if it were external An illusion is, therefore, not produced by the external object in contact with a sense-organ, but it is simply a projection of a subjective idea into the external world. This view is known as *ātmakhyāti* because according to it the subjective idea is objectivised and taken for an external thing The Mādhyamika Bauddhas, on the other hand, hold the *asatkhyāti* view that error consists in the manifestation of the non-existent (*asat*). The cognition of silver in nacre is erroneous because it manifests the non-existent silver.

There are numerous such theories of error of the different schools of philosophical thought.[8] It may again be observed that these schools have evolved their theories of error in complete consistency with their metaphysical views, so that the realistic standpoint or the idealistic one of the respective schools is maintained intact even here.

Most logicians are agreed as to the result of perception, especially ordinary perception, though they may differ in respect of minor details connected with it. In dialectics, an appeal to perception or conformity with perceptual knowledge is generally accepted as one of the principles of critical examination, of course in respect of objects amenable to the senses. No argument however strong should ordinarily contradict our perception or empirical experience; and no reasoning is generally held to be valid unless it is corroborated by an illustration where the *vyāpti* (rule of invariable concomitance) is found to hold true.

Śabda (Word or Verbal Testimony)—All except the Cārvākas, the Buddhists and the Vaiśeṣikas recognise *Śabda* or Verbal Testimony, especially scriptural testimony as a distinct *pramāṇa* (source of knowledge) The Vaiśeṣikas and the Buddhists agree that the validity of *śabda* depends on the credibility of its author or speaker. Authoritative statement (*āpta-vacana*) even in the form of *Veda* and other scriptural

texts depends on the credibility of the author, viz God argues the *Vaiśeṣika-sūtra* 1.1.3 (*tadvacanād āmnāya-prāmāṇyam*). The *Vaiśeṣika-sūtra* attempts to prove that the *Veda* is not *apauruṣeya* (authorless) but has an author, viz. God. Sentence structure in the *Veda* presupposes intelligence (*buddhi*), and similarly words such as 'gives' presuppose intelligence. Moreover, the meaning of a statement is inferred on the strength of the knowledge of the connection between word and meaning or thing denoted.[9] As Śrīdhara says. 'Word is an instrument of inferential knowledge because it gives rise to knowledge of things by force of a universal connection, just as smoke gives knowledge of fire by force of the universal connection between smoke and fire (*śabdo'numānaṁ vyāpti-balenā'rtha-pratipādakatvād dhūmavat.*—NK, p. 213) The Vaiśeṣikas say that on hearing a sentence, the listener infers as follows:

"The words constituting this speech or statement must have been preceded by the knowledge of the mutual connection of things as intended by the speaker and recollected by his words.

Because they are possessed of expectancy (*ākāṅkṣā*), consistency (*yogyatā*) and contiguity (*āsatti*) and convey the intention of the speaker.

The words of all statements possessing expectancy, etc and conveying the intention of the speaker are preceded by the knowledge of the mutual connection of things as intended by the speaker and recollected by his words, just like the words of a statement or speech, viz. 'Bring a jar' uttered by me."

If we can thus derive knowledge of the speech by means of inference, there is no necessity, argue the Vaiśeṣikas, of admitting a separate source of knowledge called *śabda* (verbal testimony).

But the relation between word and thing (the relation of denoter and denoted) is different in character from the relation of conjunction, inherence, etc. on which inference such as that from smoke to fire is grounded The relation between

word and thing denoted cannot be said to be an inseparable one because different words mean the same thing in different languages, and even in the language of the Āryas the same word in different districts means different things. Hence the relation between word and thing is not a natural one (*svābhāvika-sambandha*), but is one depending on convention. Moreover, the truth of a statement depends on the speaker or author who may or may not be reliable (*āpta*). Thus, when it is said that *śabda* is an inferential mark which gives knowledge of things through the force of *vyāpti* or universal connection, it must be understood to mean that the connection depends on human convention (*saṅketa*), and that word is an inferential mark only when spoken by a reliable person. But such qualifications are inevitable in almost every inferential mark; for the smoke only when rising upwards in an unbroken connection with the ground, etc., can enable us to infer fire. The adding of such qualifications does not prevent the case from being a case of inference as they are not wholly extraneous to the circumstances. The Buddhists also contend that *śabda* is only a case of inference; we learn from experience the general rule that trustworthy persons' statements are true, and we apply this rule to the case of particular statements.[10] Those who accept the reality of the world hold that words have some sort of invariable (—may be invisible—) relation with things. According to the Buddhists on the other hand, words are conventionally related to concepts (*vikalpa*) (not real things—unique particulars), and in the case of *āpta* persons, these concepts centre round some, or are superimposed upon, facts, and thus words indirectly acquaint us with facts. The Jaina philosophers like the Naiyāyikas are of the opinion that as soon as we hear the word, the knowledge of the thing is generated, this knowledge being valid or the knowledge of things as they are, if the speaker is an *āpta*. Words enable us to know not only the intention of the speaker but the things also. Prabhācandra refutes at length the view that verbal testimony is a case of inference. (See

Nyāyakumudacandra. p. 538ff) The Prābhākara Mīmāṁsakas, perhaps under Buddhist influence, reduce ordinary cases of verbal testimony to inference, though not so the testimony of the *apauruṣeya* (authorless) Veda (See *Prakaraṇa-pañcikā*, pp. 14–16).

The Mīmāṁsakas are of the opinion that the relation of word and meaning or thing denoted is an eternal one and consequently word has an intrinsic validity of its own. Moreover, the Vedic word is *apauruṣeya*, does not emerge from any author or speaker, but is beginningless, so its credibility does not at all depend on the credibility of any extraneous factor. In fact the Mīmāṁsakas initiated the view of intrinsic validity of knowledge mainly for the sake of *śabda pramāṇa*. In their attempt to justify the authority of the Veda, the ancient thinkers raised various problems which can be studied for their own importance, independently of that of the Vedas —the problems of language as the verbal symbol of thought, of words, meanings, relation of word and meaning, the import of propositions, the source and ultimacy of the validity of knowledge, the principles of textual interpretation and finally the claim of verbal testimony to be an independent source of knowledge (*pramāṇa*) Other schools which hold that *prāmāṇya* has to be ascertained extrinsically, nevertheless admit *pramāṇas* if these give information about facts, otherwise even perception could not be admitted as an independent *pramāṇa*, for when the validity of perception is doubted, it has to be established through inference. *Śabda* can be regarded as an independent *pramāṇa* as much as perception or inference. There are many cases where words are the only source of our knowledge.

Modern Western Philosophy feels sick at the very idea of having to accept anything on the authority of the testimony of others, and so very few modern western philosophers feel inclined to devote any serious attention to the problem of verbal testimony. But Montague has bestowed some attention on this neglected topic. To a certain extent his view resembles that of the Naiyāyikas. For he thinks that though the validity

of testimony can be ultimately established only by some other means, yet a testimony that is open to free and honest study remains as legitimate a source of knowledge as any other.[11] Man has a tendency to believe in the truth of what he hears unless there is a special cause for doubt or misbelief.[12] Man, moreover, has not the time and energy to verify everything for himself, so all progress would be stopped if the testimony of others were not at all heeded. Again verbal testimony (especially scriptural testimony) is the only source of knowledge in the case of *atindriya*, supersensuous things, and scriptural testimony is relied on as it is believed to be backed by intuitive experience not within the reach of ordinary persons.

It has been made a point of damaging criticism that in most of Indian Philosophy reasoning is subservient to scriptural testimony and not free. In fact, the very name of philosophy is denied to Indian thought. In actual practice however, we find that the ancient thinkers have mostly resorted to reasoning in the exposition of the tenets of their systems and in refuting rival views. Moreover, we find that the basic texts remaining the same a number of schools with diverse views have arisen in the case of the Vedānta or Uttara Mīmāṁsā. This could happen only if the different thinkers had reasoned out their views more or less independently of the Vedānta texts. These conclusions must have, in their view, support in the respective scriptural texts because they believe that the truth of reason cannot be fundamentally different from the intuitive truth expressed in the scriptures. To prove this they used all their exegetic and dialectic skill to interpret the scriptural texts in consonance with the truths more or less independently grasped by them. Moreover in debates and discussions, dialecticians—especially those adhering to different schools of thought whose scriptural texts were not acceptable to one another—relied mostly on reasoning to prove their position and refute the opponent's. This suffices to show that even though according to some schools only such reasoning was to be admitetd

as was not contradictory to the scriptural word (*āgamāvirodhi-tarka*) this did not actually come in the way of the free development of rational thought The Indian thinkers integrated different kinds of experiences, both empirical and intuitive and, correlated the different types of knowledge derivable from them.[13]

Upamāna (**Comparison or Analogy**)— According to the *Nyāya-sūtra* 1.1.6 (*prasiddha-sādharmyāt sādhyasādhanam upamānam*), *upamāna* is the establishing of what is to be established from a known resemblance or from resemblance to a known thing. This definition is not very clear for thus *upamāna* could not be clearly distinguished from *anumāna* which also is a process of proving the probandum from likeness to a known thing.[14] The classical account of *upamāna* is as follows A townman is told by a forester, "*Yathā gauḥ tathā gavayaḥ*" (A *gavaya* is like a cow) He goes to a forest, sees a creature resembling a cow and realises that this is the creature called a *gavaya* According to Vātsyāyana, the outcome of this process (*upamāna-phāla* or *upamiti*) is the cognition of the name as applying to this thing. The instrument of cognition or the *upamāna* here is the knowledge expressed in the formula '*yathā gauḥ tathā gavayaḥ*'; but according to others it is the perceived resemblance of the creature now present to a cow, assisted by the memory of the information previously received that a *gavaya* is like a cow. The cognition between designation and thing designated (*saṁjñā–saṁjñi-sambandha*) is arrived at by means of this *upamāna*. This may seem trivial. But Vātsyāyana's examples show that the knowledge of the name carries a good deal more with it. Knowing that the herb called *mudgaparṇi*, bean-leaf is like a bean, a person finds a herb like a bean, realises that this is the thing to which the name 'bean-leaf' is given and plucks it for medicinal purposes.[15] The recognition of the object possessing certain properties is the important thing, not a mere knowledge of names So understood, *upamiti* is a result of importance, and this kind of indirect identification of hitherto unseen objects plays no small part in the growth of knowledge.

In the opinion of Praśastapāda, knowledge of likeness as an instrument of valid cognition is nothing but credible testimony (*āpta-vacana*). But since Praśastapāda reduces testimony to inference, this means that he has reduced *upamāna* to *anumāna*. The Buddhists also reduce *upamāna* to perception or testimony, which latter is according to them only a case of inference. The author of the *Nyāya-sūtra* has in his examination of *upamāna* (2.1.44–48) attempted to refute the view that *upamāna* is only *anumāna*; whereas we infer the existence of fire which is not present to sense, we apprehend by *upamāna* that a thing present to sense is a *gavaya*.

According to the Mīmāṁsakas (—See *Śābara-bhāṣya* 1.1.5—), *upamāna* gives rise to a cognition in respect of an object not in contact with sense. The sight of the *gavaya* gives rise to remembrance of the cow, *upamāna* makes us apprehend the similarity of the object which is present (e.g. *gavaya*) to an object which is not present (e g. cow), but which is called up by memory. A certain person who has seen his own cow at home goes to a forest and sees a *gavaya* and forms the perceptual judgement, 'This *gavaya* is like my cow'. He passes thence to another judgement 'My cow is like this *gavaya*', which is *upamiti*, the former judgement being the *upamāna*. The Kevalādvaitins' conception of *upamāna*, is the same as that of the Mīmāṁsakas.[16] The judgement 'My cow is like this *gavaya*' being derived through the mediation of the knowledge. 'This *gavaya* is like my 'cow' cannot be classed under *pratyakṣa* as it is not immediate knowledge, nor is it a case of inference as we do not find in the process leading to this knowledge any trace of syllogistic reasoning and hence the Mīmāṁsakas and Kevalādvaitins give it a different name—*upamāna*. Śrīdhara says that this is only a case of memory.[17] Vācaspati's contention in his *Tattva-Kaumudī* on *Sāṁkhya-kārikā*, 5 is that *upamāna* can be subsumed under perception because the cow's similarity to the *gavaya* is not something different from the *gavaya's* similarity to the cow which latter is an object of perception.

Arthāpatti (**Assumption or Implication**)—According to the classical account of it, *arthāpatti* consists in finding a supposition which reconciles an apparent contradiction. The two stock examples are :—(a) You have information that Caitra is alive, but you do not find him in his house. From this you draw the implication that he is out. (b) You are told of one Devadatta who is stout and does not eat by day; you draw out of this statement the implication that he eats by night. The former is given as an illustration of *dṛṣṭārthāpatti* (implication from experienced facts), the latter as an illustration of *śrutārthāpatti* (implication from words).[18] *Śrutārthāpatti* literally means the assumption of something in order to explain a fact known through testimony. According to the *Vedānta-paribhāṣā*, it is two-fold according as it concerns the supposition of a verbal expression (*abhidhāna*) or of a thing meant (*abhihita*). The first is illustrated when, for instance, on being asked 'to shut' we supply the word 'door' in order to explain the sense with reference to that context, finding it otherwise inexplicable. The second is illustrated when on being told by the *Veda* that by performing the Jyotiṣṭoma sacrifice one can go to heaven, we assume that the sacrifice must give rise to some lasting unseen force (*apūrva*) without which a momentary sacrifice cannot be the cause of a life in heaven.

This does not seem to have been the only account of *arthāpatti* current in the early schools (—see NS., 2.2.1–6 and *Bhāṣya*). Vātsyāyana explains *arthāpatti* as another thing which follows as an implication of the thing that is stated (*abhidhīya-māne'rthe yo'nyo'rthaḥ prasajyate*—NB., 2.2.1). For instance, what is implied in the statement that when there are no clouds it does not rain, is that it rains when there are clouds (that is to say, clouds must be there when it rains). This means that the fact cognised through implication is that the production of the effect, rain, is limited to the existence of the cause, clouds. Vātsyāyana further characterises this process as apprehending from opposition what is not stated (*anabhi-*

hitasyā'rthasya pratyanīkabhāvād grahaṇam—NB., 2.2.2). From the statement that in the absence of the cause, the effect is not produced, we arrive by implication at what is related to this as its opposite, viz. the effect is produced in the presence of the cause, for from a negative comes the opposed affirmative (NB., 2.2.4). Faddegon suggests that *arthāpatti* originally "was a notion due to the exigencies of exegesis. Where a literal explanation of the text was not possible, one had to go back (*āpadyate*) to the meaning or intention of the speaker (*artha*). *Arthāpatti* thus signified reading between the lines. Later on, *arthāpatti* got a wider meaning, only the *śrutārthāpatti* was a remnant of the old use of the term".[19] Vātsyāyana does not draw the distinction between *dṛṣṭārthāpatti* and *śrutārthāpatti* but Śabara (or before him the Vṛttikāra) and others do.

Those who do not recognise *arthāpatti* as a distinct *pramāṇa* include it in inference. The Naiyāyika tradition makes *arthāpatti* a case of *kevala-vyatireki anumāna* (purely negative inference), the form being : "Devadatta eats by night, because he is stout without eating by day; those who do not eat by night are not stout-without-eating-by-day, like so and so who eats neither by day nor by night and is thin; not so Devadatta."

The Advaitins on the other hand argue that all cases of *vyatireki anumāna* can be and should be considered as cases of *arthāpatti*. When Praśastapāda calls *śrutārthāpatti* (verbal implication) '*anumitānumāna*' what he means is simply this that verbal testimony (*śruta*) is itself (on his showing) inference, and the facts derived by implication from words are arrived at inferentially, so the implication got from such facts is inference from the inferred.[20]

The Mīmāṁsakas' contention is that *arthāpatti* cannot be treated as a case of *anumāna*. In *anumāna* we know the mark or the probans (*liṅga*) first and ascertain the probandum (*sādhya*) through that afterwards. If *arthāpatti* were an inference what would be the *liṅga* or probans ? In the above-mentioned

instance, neither mere absence from home nor the mere fact of his being alive can be a *liṅga* for inferring that he is out, but the fact of his absence from home related with that of his being alive is the *liṅga* from which the fact of his being out can be inferred. But we find that the correlation of these two facts is not possible without the assumption that he is out, for until this alternative comes to the mind, being alive and absence from home appear incompatible. That is to say, knowledge of the probans presupposes the knowledge of the *sādhya* and nothing remains to be proved by the inference. Hence the attempt to reduce *arthāpatti* to inference fails, being vitiated by a petitio principii.[21] Another argument to prove the distinctness of *arthāpatti* is that in all cases of *arthāpatti* we have the *anuvyavasāya* (introspection), 'I suppose or assume' (*kalpayāmi*, *arthāpayāmi*) and not 'I infer' (*anuminomi*) as in the case of inference.

Sambhava (**Inclusion**)—Vātsyāyana says in his *Bhāṣya*, 2.2.1-2 that what is called *sambhava* is the grasping of the existence of another thing as a result of grasping the existence of a thing which is its *avinābhāvin* i.e does not exist without it.[22] For instance, we apprehend the existence of an *āḍhaka* (a weight which is a quarter of a *droṇa*) from apprehending the existence of a *droṇa*, and of a *prastha* (which is a quarter of an *āḍhaka*) from apprehending the existence of an *āḍhaka*. Vātsyāyana includes *sambhava* too in inference, as a quantity and its constituents being united by the relation of invariable concomitance, the apprehension of the constituent (*samudāyin*) by means of the aggregate (*samudāya*) is inclusion and this is just inference.[23] *Sambhava* seems to have originated as a case of arithmetical or mathematical reasoning and was not further generalised.

Aitihya (**Tradition**)—Vātsyāyana characterises *aitihya* as having no assigned author because it has been handed down through a succession of pronouncements as 'They say' (*iti hocur ity anirdiṣṭa-pravaktṛkam pravāda-pāramparyam aitihyam* —NB., 2.2.1.), e.g. 'They say a spirit resides here.' The reason

for distinguishing it from *śabda* appears to be that *aitihya* has no assignable author, though it must have originated at some time from some one, whereas *śabda* is somebody's word or is regarded as *apauruṣeya* (not owing its origin to any author, or beginningless). The *Nyāya-sūtra* (2.2 2) subsumes *aitihya* under *śabda* and Praśastapāda says that *aitihya* when true is nothing but *āptavacana* (credible testimony); and, as Śrīdhara adds, when false, the question whether it is a *pramāṇa* (source of valid cognition) does not arise at all.[24]

Ceṣṭā (Gesture)—Gestures also can give rise to cognition and so are regarded as a distinct *pramāṇa* by the Tāntrikas. Praśastapāda holds that *ceṣṭā* as a supposed *pramāṇa* is really inference. Since we find that cognition is produced by the gesture of a person whose expressive actions are known to us, this is nothing but a case of inference. That is to say, it is not the gesture as such that produces the knowledge, but our knowledge of what the person means by his gestures. The knowledge conveyed by the gesture, therefore, depends on the connection between the gesture and the person's intention; this is a case of *vyāpti* and the cognition is therefore inference as it is arrived at on the strength of *vyāpti*.[25] *Ceṣṭā*, it may be observed, is similar to *śabda* in that like the latter it is rooted in the convention (*saṅketa*) as to the significance of particular gestures which serve as symbols. Inference on the other hand is based on a mark (*liṅga*) which has a natural relation with the probandum.

Pariśeṣa **(Elimination)** which some Mīmāṁsā authorities made a separate *pramāṇa* is plainly a case of inference. The *Śeṣavat anumāna* recognised by the *Nyāya-sūtra*, it may be observed, is based on elimination.

Abhāva **(Non-existence) or** *Anupalabdhi* **(Non-apprehension)**—As Randle says, it is clear from the discussion in the *Nyāya-sūtra*, 2.2.7-12 that the investigation of the nature of non-existence (*abhāva*) arose out of a dialectical difficulty—How can we know that which is not? or How can we assert that anything is not? It is the problem of how a negative judgment

is possible.[26] To account for this a distinct *pramāṇa*, viz. *abhāva* (non-existence) or *anupalabdhi* (non-apprehension) is recognised by the Mīmāṁsakas and the Kevalādvaitins. It is confirmed by a *tarka* (hypothetical reasoning) of the form, "If the thing were present it would be apprehended."

The *Nyāya-sūtra*, 2.2.2 denies that *abhāva* is a distinct *pramāṇa* on the ground that it is inferential in character. Neither the author of the *Nyāya-sūtra* nor *Vātsyāyana* explains how we know that a thing is not. Instead Vātsyāyana shows that given the knowledge that something is not we can utilise this knowledge as a means of apprehending that something else is, and when *abhāva* is in this sense a *pramāṇa* it is simply an inferential process. *Abhāva* as a *pramāṇa* depends on opposition; an opposition being established in the form 'where this is, that does not occur', we infer through the non-occurrence of the effect the existence of something which counteracts the cause (*kāraṇasya pratibandhakam*).[27] Praśastapāda is of the same view except that he identifies *abhāva* with inference from absence of effect to absence of cause, whereas Vātsyāyana identifies it with inference from absence of effect to presence of a counteracting cause

Śrīdhara enters into a long dialectical discussion with regard to this problem of which we may note here a few important points. He argues that even those who assert that *abhāva* is a distinct *pramāṇa* have to qualify their assertion by adding that the thing thus cognised as absent must be such a thing as is capable of being perceived if present and that the conditions leading to perception must be present. But this introduces an inferential element into the apprehension of non-existence, the probans being the fact that the thing is not perceived and the major premise the universal concomitance of the non-perception of an object capable of being perceived (*yogyānupalambha*) and its non-existence (*jñeyābhāva*)[28] A number of difficulties are connected with the recognition of *abhāva* or *anupalabdhi* as a distinct *pramāṇa*, this *pramāṇa* being primarily admitted for the cognition of

abhāva, negation or non-existence of a thing. The Buddhists also admit inference from the reason, *anupalabdhi* or non-apprehension of a thing.

The Prābhākaras maintain that non-existence has no reality apart from that of an existent thing. The non-existence of jar is therefore nothing over and above the existence of the bare locus i.e. ground, unoccupied by any other thing. The Sāṁkhyas also hold that of the many transformations (*pariṇāma*) of the locus, the one that is devoid of any superstratum is identical with the non-existence of the jar on the ground (*see Tattva-kaumudī* on *Sāṁkhya Kārikā*, 5). The Jaina thinkers are of the same view. Thus according to the Prābhākaras, the Sāṁkhyas and the Jainas, the non-existence of a thing is nothing more than the existence of the bare locus, and so the judgement of non-existence of the type in question can be easily said to be derived through perception. The difficulty as to how non-existence can become the object of perception does not arise at all, because perception of the non-existence of the jar is equivalent to the perception of the bare ground which is certainly an object of perception. According to the Naiyāyikas also, non-existence is an object of perception but in a different way. According to them, the non-existence of a thing in a particular locus is not identical with the locus, but is its *viśeṣaṇa* (qualifier), for we say that the ground is characterised by the non-existence of a jar. Hence it is proper to suppose that the non-existence of the jar is perceived through the perception of the ground, just as its attributes colour, etc. are perceived. The Naiyāyikas admit a special kind of sense-object contact (*sannikarṣa*) and call it *viśeṣaṇatā*. We need not enter into further details.

The Bhāṭṭas and the Kevalādvaitins, on the other hand, maintain that non-existence (*abhāva*) is not identical with its locus, but is something additional to it.[29] If the non existence of jar on the ground be the same as the existence of the bare ground, we should perceive the non-existence of the jar even while it is there on the ground, because it cannot be

said that the ground as such is not perceived while the jar is on it. Again, if perception of the bare locus led to the knowledge of the non-existence, there could not arise the knowledge of the non-existence of jar on the ground, while there was another thing, e.g. a cloth on it. And since there may be simultaneous non-existences of many things in the same locus, we should apprehend all of them every time that we perceive the locus, but this is not what is observed. Moreover, it happens very often that we become aware of the non-existence of a thing in a locus long after the locus itself is perceived. How could this be possible if the perception of non-existence consisted simply in the perception of the locus ? Therefore, it cannot be held that the knowledge of non-existence of a thing means nothing more than the knowledge of the bare locus, and perception of the locus cannot by itself amount to the perception of the non-existence present in it. Nor is the Nyāya view tenable, since it cannot be understood how non-existence can be related either with its locus or with sense, as the relation of *saṁyoga* or *samavāya* is possible only between two existent entities. Therefore, non-existence is not perceptible through the sense-organs.

It cannot also be maintained that non-existence can be inferred from the knowledge of some mark or *liṅga* that is invariably connected with it, for when non-existence itself is not ascertained how can connection of something else with it be ascertained ? Therefore, non-existence or *abhāva* can be known through a unique means of knowledge (*pramāṇa*) called *anupalabdhi* (non-apprehension). Śabara says that the absence of other means of knowledge is itself a means of the knowledge of the non-existence of things not presented to sense (*abhāvo'pi pramāṇābhāvo nāstīty asyārthasyāsannikṛṣṭasya—Śābara Bhāṣya* 1.1.5.). Kumārila and Pārthasārathi Miśra clarify this by saying that if a thing be such that while it exists, its existence can be revealed through any of the five *pramāṇas*, and if still there is no apprehension of the thing, then this non-apprehension (*anupalabdhi*) of the thing is proof (*pramāṇa*) of the non-

existence (*abhāva*) of the thing. All non-apprehension cannot lead to the knowledge of the non-existence of things, for then non-apprehension of a jar in a dark room should lead us to say that it is not there. Only the non-apprehension of an object capable of being apprehended in the circumstances can enable us to know its non existence. All the four kinds of *abhāvas*—viz. *prāgabhāva* (prior non-existence), *pradhvaṁsābhāva* (posterior non-existence), *anyonyābhāva* (mutual non-existence or negation, i.e. difference of things) and *atyantābhāva* (absolute non-existence)—can be known by means of *anupalabdhi*.

A question connected with *anupalabdhi* which is not sufficiently discussed is : Does *anupalabdhi* enable us to know the absence of only that thing the existence of which could be perceived if it were present ? Or does it acquaint us with the absence of a thing the existence of which, if present, could be known by any of the positive sources of knowledge ? That is to say, does *anupalabdhi* mean non-perception or does it mean non-cognition in general ?[30] The Kevalādvaitins, one can almost certainly say, mean by *anupalabdhi* 'non-perception'. But the same cannot be said with confidence of the Bhāṭṭa Mīmāṁsakas, whose statements can be interpreted to mean that there can be five different kinds of *anupalabdhi* according as it is absence of perception or inference or testimony or *upamāna* or *arthāpatti*, though we do not find any precise statement of this five-fold division in any of the important works of the Bhāṭṭa school. Now it is understandable that the non-perception of a thing can acquaint us with its absence, but it it difficult to understand how the absence of inference, testimony, etc. can lead to the knowledge of the absence of a thing. The conditions necessary for inference, for instance, being present, there will be inference, whereas if the conditions are not available there will not be inference. But this alone will not give as any knowledge of the non-existence of the probandum e.g. fire. At the most there may be a doubt—as much about the non-existence of fire as about its existence Thus,

though theoretically there can be as many kinds of non-cognition as there are of cognition, the only kind of non-cognition that can yield knowledge about the non-existence of a thing is non-perception, and therefore as a *pramāṇa* non-cognition is practically equivalent to non-perception.

Smṛti (**memory**), *pratyabhijñā* (**recognition**) **and** *tarka* (**hypothetical reasoning**)— The Jaina logicians, as said above, regard *smṛti, pratyabhijñā* and *tarka* as independent *pramāṇas* (sources of valid knowledge). Their contention is that processes which are indispensable in the acquisition of a piece of valid knowledge of the inferential kind—and in a way also in the acquisition of perceptual knowledge, for memory and recognition do help us in the forming of a perceptual judgment—cannot be denied the status of an instrument of valid knowledge. As Hemacandra says, *smṛti* (memory) is brought about by the revival of past impressions and is expressed in the form 'That was such and such an object'. Memory is a case of valid knowledge as can be seen from the fact that we succeed in finding out at a later occasion what we had kept somewhere at an earlier occasion. Memory cannot be said to be devoid of an object for the earlier experienced object is its object also, and its own object is manifested in memory as in any other type of valid knowledge; without memory, inference would become an impossibility since it does not arise unless *vyāpti* is recalled.[31] *Smṛti,* as we have seen, is not regarded as valid knowledge by most of the other schools, and it is not regarded as an independent *pramāṇa* by any other school as it yields no new knowledge and the object is not present.

Pratyabhijñā (recognition) is brought about by perception and memory and it takes joint cognizance of two objects in the form 'This is that', 'This is like that', This is unlike that', 'This is the counter-entity of that'—i.e. by linking the two. Those who posit *upamāna* as a *pramāṇa* which cognises similarity would have to posit another *pramāṇa* for cognising dissimilarity, etc. whereas *pratyabhijñā* alone can comprehend all these.[32]

Thus *pratyabhijñā* has a wide scope in Jaina logic. The other logicians excepting the Buddhists regard recognition as perceptual and as a piece of valid knowledge, but it is not generally regarded as an independent source of valid knowledge.

A separate chapter has been devoted to *tarka*.

Debates are carried on with the help of arguments based on *pramāṇas* and on the strength of *pramāṇas* and *tarka*, the latter facilitating the operation of the *pramāṇas* by pointing at an undesirable contingency that would arise if a particular position were not accepted. I have dwelt at length on *anumāna* and *tarka* (which is not generally recognised as a *pramāṇa*) as these are more intimately connected with the texture of dialectic, and have treated other *pramāṇas* very briefly as much has been written on the *pramāṇas* in works on Indian logic. An attempt has been made to lay stress on certain points which seemed to deserve special attention in the hope that this would go some way in bringing about an inclination to appreciate some of the *pramāṇas* (notably *yogi-pratyakṣa* or *anubhava* and *śabda*) in the true spirit in which they were meant to be appreciated and evaluated. The exposition, it may have been observed, is consequently not always proportional to the importance of the different *pramāṇas*. On the whole, perception, inference and testimony are the three major *pramāṇas* in Indian logic and dialectic, and the others can without much difficulty be very well subsumed under one or the other of these.

NOTES

1 Pratyakṣam ekaṁ Cārvākāḥ Kaṇāda-Sugatau punaḥ,
anumānaṁ ca tac cātha Sāṁkhyāḥ śabdaṁ ca te api.

Nyāyaikadeśino' py evam upamānaṁ ca kecana,
arthāpattyā sahaitāni catvāry āha Prabhākaraḥ.

abhāva-ṣaṣṭhāny etāni Bhāṭṭā Vedāntinas tathā,
Sambhavaitihyayuktāni tāni Paurāṇikā jaguḥ.

—TR., p. 56 (7 cd-10 ab).

2 For details see *Indian Logic in the Early Schools*, pp. 77–146—H. N. Randle, *Indian Psychology—Perception*—Sinha, *The Six Ways of Knowing*, pp. 31-128—D. M. Datta. I am extremely indebted to these works.

3 See *Vedānta-paribhāṣā*, *Pratyakṣa*.

4 *Viśadaḥ* (*samyag-arthanirṇayaḥ*) *pratyakṣam*.—PM., 1.1.13.

5 See *Bhāṣā-pariccheda*, 64–65.

6 See my article on 'Problem of Omniscience' published in *Brahma-Vidyā* (Adyar), 1962.

7 See my paper on '*Nirvikalpa Pratyakṣa*' read at the All India Oriental Conference, Śrīnagara (1961).

8 See '*Avidyā—A Problem of Truth and Reality*' (section on '*Avidyā* in Logic') (Gujarat University, Ahmedabad).

9 Śabdādīnām apy anumāne'ntarbhāvaḥ samāna-vidhitvāt. yathā prasiddha-samayasyā'sandigdha - liṅgadarśana - prasiddhyanusmaraṇābhyām atīndriye'rthe bhavaty anumānam evaṁ śabdādibhyo'pīti. śruti-smṛti-lakṣaṇo' py āmnāyo vaktṛ-prāmāṇyāpekṣaḥ tadvacanād āmnāyaprāmāṇyaṁ (VS 1.1.3) liṅgāc cā'nityo buddhipūrvā vākyakṛtir vede (VS. 6.1.1) buddhipūrvo dadātir (VS. 6.1.3) ity uktatvāt—PB., 213; also NK on it, pp. 213 ff. (Vizianagram Sanskrit Series, 1895).

10 See NV., pp. 60–61; NVTT, pp. 204 ff where Uddyotakara and Vācaspati state the objection raised by Diṅnāga and refute it. See also PV., *Svārthānumāna-pariccheda*, pp. 71 ff, 102; TvS, 1515–1520.

11 *Ways of Knowing*, p. 49—Montague.

12 "We accept on trust nine-tenths of what we are told to be true. Man is a suggestible animal and tends to believe what is said to him unless he has positive reason for doubting the honesty or competence of his informant".—*The Ways of Knowing*' (Chapter on *Authoritarianism*) — Montague.

13 See '*Avidyā — A Problem of Truth and Reality*' — Chapter on 'The Possibility of Valid Knowledge'—E. A. Solomon (Gujarat University).

14 Cf. Udāharaṇa-sādharmyāt sādhya-sādhanaṁ hetuḥ.—NS. 1.1.34—'The Reason (second member of the syllogism) is the proving of what is to be proved from likeness to an example'.

15. NB., 1.1.6.

16 Gavaya-niṣṭha-go-sādṛśya-jñānaṁ karaṇaṁ, go-niṣṭha-gavaya-sādṛśya-jñānaṁ phalam.—*Vedānta-paribhāṣā (upamāna).*

17 Ye'pi Śabarasvāmiśiṣyā anubhūtasya go-piṇḍasya vane gavayadarśanāt smṛtyārūḍhāyāṁ gavi madīyā gaur anena sadṛśīti sārūpya--jñānam upamānam ācakṣate tad api smaraṇam eva.—NK., p. 221.

18 See NK., p. 222.

19 *Vaiśeṣika System*, p. 478, foot-note—Faddegon (Amsterdam, 1918).

20 Darśanārthād arthāpattir virodhy eva śravaṇād anumitānumānam—PB., p. 223 and NK., pp. 223-225 on it.

21 *Śāstradipikā*, p. 78.

22 Sambhavo nāmā'vinābhāvino'rthasya sattāgrahaṇād anyasya sattā-grahaṇam.—NB., 2.2.1.

23 Avinābhāvavṛttyā ca sambaddhayoḥ samudāya-samudāyinoḥ samudāyenetarasya grahaṇaṁ sambhavaḥ. tad apy anumānam eva.—NB., 2.2.2. See also PB. and NK., p. 225.

24 PB. and NK., p. 230.

25 Prasiddhābhinayasya ceṣṭayā pratipattidarśanāt tad apy anumānam eva. —PB., p. 220; see also NK. on it.

26 *Indian Logic in the Early Schools*, pp. 328—H. N. Randle.

27 Asmin satīdaṁ nopapadyate iti virodhitve prasiddhe kāryānutpattyā kāraṇasya pratibandhakam anumīyate.—NB. 2.2.2.

28 Abhāvo'py anumānam eva yathotpannaṁ kāryaṁ kāraṇa-sadbhāve liṅgam, evam anutpannaṁ kāryaṁ kāraṇāsadbhāve liṅgam.—PB., p. 225.

Yo'py abhāvaṁ pramāṇam icchati tasyā'pi na jñānānutpādamātrāt prameyābhāvajñānaṁ svarūpa-viprakṛṣṭasyā'pi vastuno'bhāvapratītiprasaṅgāt. kiṁ tu jñānakāraṇeṣu satsu jñāna-yogyasya vastuno jñānānutpādo' bhāvāvagama-nimittam. na cāyogyānupalambhād yogyānupalambhasya kaścit svarūpato viśeṣo abhāvasya niratiśayatvāt, tena nāyaṁ svaśaktyaivendriyavad bodhakaḥ, kiṁ tu yogyānupalambho jñeyabhāvaṁ na vyabhicarati ayogyānupalambhas tu vyabhicarati saty api jñeye tasya sambhavād, etāvatā viśeṣeṇa yogyānupalambhaḥ pratipādako nāparaḥ. evaṁ saty abhāvo liṅgam eva syād avinābhāvagrahaṇa—sāpekṣatvāt tadanapekṣatve tu aviśeṣeṇa tasyābhāvasyā' bhāva-bodhakatvam iti durnivāraṇaprasaṅgaḥ—NK., pp. 225-226. Compare the Buddhist inference from *anupalabdhi*.

29 See *Ślokavārttika* and *Śāstradīpikā*, pp. 83 ff on *abhāva*; also *Vedānta-paribhāṣā* on *abhāva*.

30 D. M. Datta has raised this question and tackled it in a satisfactory manner in his '*The Six Ways of Knowing*', pp. 180 ff, to which the reader is referred. His analysis of fine points in logic is very subtle.

31 Vāsanodbodha-hetukā tad ityākārā smṛtiḥ.—PM. 1.2.3. See also *Vṛtti* on it.

32 Darśana-smaraṇa-saṁbhavaṁ tad evedam tat-sadṛśaṁ tad-vilakṣaṇam tat-pratiyogityādi saṅkalanam.—PM. 1.2.4. Yeṣāṁ tu sādṛśya-viṣayam upamānākhyam pramāṇāntaraṁ teṣāṁ vailakṣaṇyādi-viṣayam pramāṇāntaram anuṣajyeta.... —*Vṛtti* on the above.

CHAPTER 12

TARKA (HYPOTHETICAL REASONING) AND SOME PRINCIPLES OF DIALECTICAL CRITICISM

The problem of paramount importance which logic has to face is that of the knowledge of *vyāpti* (the universal concomitance between the middle term and the major term) as the validity of the conclusion of an inference ultimately depends on the validity of the knowledge of *vyāpti*. We have seen how difficult, nay well-nigh impossible, it is to determine the *vyāpti* which is universal in its reference. Indian logic has tried to solve this problem with the help of *tarka* (hypothetical reasoning) which not only corroborates the knowledge of the invariable concomitance between the middle term and the major term but also serves to facilitate the conclusion of an inference. As a matter of fact, *tarka* facilitates the operation of all *pramāṇas* (sources of knowledge) by eliminating doubt and thus contributing to the apprehension of truth.

Apart from its technical sense, '*tarka*' has in Indian philosophy the meaning of reasoning or rational thinking in general. It is found in this sense in the literature of the pre-*dārśanika* period as well as in that of the *dārśanika* period. But it cannot be definitely asserted whether *tarka* as distinct from *anumāna* was known in the pre-*dārśanika* period. We have many a reference to *tarka* as serving to give a rational or logical exposition of scriptural passages and also to it as endangering the authority of the scripture. But it is difficult to say that *tarka* is here meant to be different from reasoning or logic in general. In the *Caraka Saṁhitā*, as we saw in the Chapter on *Valid Reasoning*, we have a brief exposition of *yukti*. In the *Sūtrasthāna*, 11,

āptopadeśa (assertions of a reliable person), perception, inference and *yukti* (cogitation) are mentioned as means of investigation into the truth or falsity of things. *Yukti* is that cognition which observes or cognises things produced by an aggregate of causal factors; it pertains to things of all the three times. For instance, from the causal aggregate of water, ploughed earth, seed, season there is the production of corn; the aggregate of the six *dhātus* gives rise to foetus; the full causal apparatus being present, fire is ignited; there being the complete aggregate of the four factors (viz. physician, medicine, nurse, patient), disease is expelled. The *Caraka Saṁhitā* gives the illustration of the examination of the problem of rebirth by means of *āptopadeśa*, *pratyakṣa*, *anumāna* and *yukti*. One sees that children of the same parents are unlike each other in respect of complexion, figure, temperament, etc., and a newly born child without being taught knows how to smile, suck the mother's breast and so on. From this one infers that one's *karma* (force of action) cannot be exhausted unless it has yielded its fruit; the action of a previous life passes on to a future life and it is termed *daiva* 'destiny'; the difference of complexion etc. is on account of the *karma* of a previous life; what one does in this life will yield its fruit in a future life; the seed is inferred from the fruit and the fruit from the seed; thus from the experience of the present life one can infer the actions of a past life and from the actions in this life one can infer what sort of experiences one would have in a future life. The *yukti* is as follows :

The foetus arises from the aggregate of six *dhātus* (including the sentient principle); activity arises jointly from the doer and the instruments; it is only the act that is done that yields fruit and not what is not done; a sprout cannot arise from a non-seed; the fruit is in accordance with the act done; a seed cannot yield quite a different fruit.[1] Thus it is established that the present soul is one with that in the previous life; otherwise absurdities would arise.

Śāntarakṣita has refuted *yukti* recognised as a separate

pramāṇa by Caraka (See *Tattvasaṅgraha*, 1692ff); according to him, Caraka regards it as distinct from *anumāna* inasmuch as no *dṛṣṭānta* (example) is given in *yukti*. As can be seen from the above instance, it tries to establish acts of a previous life as the cause of the experiences of this life. It is thus based on cause-effect relationship. Inference argues directly from the cause to the effect and vice versa; whereas *yukti* is prolonged reasoning pointing out the absurdity that arises if the relation of cause-effect is not accepted or is wrongly accepted between the phenomena. In the early period of logical development reasoning was mostly based on cause-effect relationship. Further in the *Vimāna-sthāna*, 8.40, *anumāna* is described as *tarka* (reasoning) requiring the help of *yukti* (*anumānaṁ tarko yuktyapekṣaḥ*). Thus, *yukti* in the *Caraka Saṁhitā* can be said to correspond to *tarka* of the *Nyāya-sūtra* and other works on logic, which helps the conclusion arrived at by infeience and the like by showing the absurdity that follows from not accepting it. In the works on logic, *tarka* signifies reasoning by the method of reductio ad absurdum.

Tarka (hypothetical reasoning) is defined in the *Nyāya-sūtra*, as an act of deliberation or really a dialectical act which is meant for the determination of truth by adducing logical grounds in favour of one of the alternative possibilities when the reality is not known in its proper character (*avijñatatattve'rthe kāraṇopapattitaḥ tattva-jñanārtham ūhas tarkaḥ*—NS., 1.1.40) *. When two contradictory alternatives present themselves before us as equally possible with regard to a thing the mind oscillates between them· whether the thing could be this or that. The consideration of reasons in support of one of the alternatives helps to dispel the doubt by eliminating one of the alternatives.[2] For instance, there is a doubt whether the

* The term '*kāraṇopapattitaḥ*' in the *sūtra* means '*pramāṇopapattitaḥ*', *upapatti* meaning *sambhava*, possibility. The sense is that a person argues thus: As proofs are possible in support of this conclusion with regard to the thing it should be so. Thus *tarka* only helps to determine the superior strength of one of the two competing alternatives.

knower or the soul has an origin or not The argument that dispels one of the alternatives is that if it does not have an origin, it can enjoy the fruits of its own actions and both metempsychosis and emancipation can be possible as each succeed ing one is the cause of each preceding one in the chain of misery, birth, activity, defect, ignorance, and each preceding one is removed on the removal of each succeeding one; whereas if the soul were to have an origin, these two would not be possible. As soon as born the soul would be connected with body, sense-organs, intellect, sensations, and these would not be the fruit of its own actions; and after having come into existence it would perish, so it would not enjoy the fruits of its actions whether it be non-existent or destroyed. So one soul would not be connected with a number of bodies nor would it ever be completely disconnected from a body—which is absurd. Thus this argument supports the alternative that a soul has no origin. Such an intellectual act (*ūha*) is called *tarka.*

Tarka, according to the Nyāya school, is not an independent source of knowledge; it allows or confirms one of the two possible alternatives but it cannot determine by itself that a particular thing has of two contradictory characters one and not the other. It dispels one of the two alternatives and then the relevant *pramāṇa*—perception, inference or the like—proceeds undisturbed to determine the true nature of the object.[3] *Tarka* assents to one of the alternatives, as for example, the soul should be beginningless. The assent cannot by itself be called 'true cognition' (*tattva-jñānam*) as it is devoid of the certainty of the conviction which is characteristic of every true cognition; it is not in the form 'This is so', or 'This must be so', but only in the form 'should be so' (e.g. 'The soul should be beginningless'); thus it assents to a conclusion which is arrived at by *pramāṇas.* The *pramāṇas* come to apprehend the thing after it has been duly examined by *tarka* which thus is of use in bringing about the true cognition (*tattvajñānārtham*)[4].

Uddyotakara answers several objections against the separate treatment of *tarka*. Some hold that *tarka* does not in any way differ from doubt (*saṁśaya*) and definite conclusion (*nirṇaya*), and so should not have been separately mentioned Uddyotakara answers this by saying that these persons have been misled by the statement that *tarka* applies to things whose real character is not well known (*avijñāta-tattva*). They forget that the cognition of the nature of *saṁśaya* (doubt) is uncertain, 'Is it so or so?'; and the cognition of the nature of *nirṇaya* (definite conclusion) is definite or certain: 'It must be so'; whereas *tarka*, giving rise to a cognition which is neither uncertain nor certain, is distinct from *saṁśaya* by virtue of the possibility of proofs and yet is not endowed with that degree of certainty as is found in *nirṇaya*, since there is no observation of special details in it as there is in *nirṇaya*. *Saṁśaya* (doubt) is a cognition in which the mind wavers between two alternatives both being claimants to truth to the same extent and the alternatives remain unresolved. *Ūha* or *tarka* is a process of thought which, on the strength of logical grounds, aims at resolving the alternatives and making the acceptance of one possible This same argument serves also to set aside the view of those who hold that *tarka* is only a form of *anumāna*—*hetu*, *tarka*, *nyāya* and *anvīkṣā* being only so many names of *anumāna* itself. Other logicians define *tarka* as that inference which depends on *yukti* (corroborative proof in the form of the absurdity of the contrary conclusion) (*anumānam yuktyapekṣaṁ tarkaḥ*—NV., p. 142). * These admit that *tarka* is different from *anumāna*. '*Yukti*' is the same as 'possibility of proof' (*kāraṇopapatti*), so what the assertion of these people means is that *tarka* is cognition depending on possibility of proof, so that this involves a difference in name only. What they term '*anumāna*', the Naiyāyikas call '*tarka*'. If '*yukti*' does not mean 'possibility of proof', then it will have to be explained as to what

* Compare *Caraka-saṁhitā's* definition of *anumāna*: '*anumānaṁ tarko yuktyapekṣaḥ*' (—*Vimānasthāna*, 8.40).

'*apeksā*' (dependence) signifies, that is to say, what it is upon which inference depends in the bringing about of the cognition of its object. If it is urged that what is meant is that inference depends upon other *pramāṇas*, then it will have to be explained in what way inference is helped by sense-perception (*pratyakṣa*) and verbal testimony (*āgama*). If they help inference by having the same object as it, then what would *tarka* be? There would be a combination of the three *pramāṇas*. As a matter of fact, the notion 'it should be', which emerges from *tarka*, must be due to a cause totally different from that of the definite cognition brought about by inference, because it is entirely different in character, just as perceptual cognition is different from inferential cognition.

It may also be urged that *tarka* is inference only because like inference it depends upon the recognition of the relation between the *liṅga* (mark, probans) and that to which it belongs (*liṅgin, pakṣa*, subject). This is not correct as *tarka* does not depend on the recognition of the relation between the probans and its substratum, since neither is known in the case of *tarka*. Where both the probans and the subject (*pakṣa*) in which it subsists are known we have inference; on the other hand where the only thing that is known is the subject (*pakṣa*) and not the probans we have *tarka*, so it is not proper to say that *tarka* depends upon the recognition of the relation between the probans and the subject.[5] We may take an illustration : 'If the soul were a product, its metempsychosis and emancipation would not be possible'—this is an instance of *tarka* (hypothetical reasoning). On the other hand, a negative (*vyatireki*) inference to which *tarka* is held to be reduced is in the form, 'The living body cannot be without a soul as if it were so it would not have the vital functions'. In this latter, we fully recognise the relation between the living body and the presence of vital functions; but in the former we do not recognise any such relation between the soul and the character of being a product which in fact does not belong to it, but is only superimposed on it for the time being just for the

sake of argument; and thus there is nothing that could bring to the mind the relation between the probans and the subject.[6] Secondly, inference functions only after the character subsisting in the subject has been cognised, whereas *tarka* operates even after the cognition of characters belonging to things other than the subject. 'There should be a human agent here, because here we find horses being driven' is an instance in point : the character cognised is that of 'being driven' which does not subsist in the subject 'the human agent', so that here we have an intellectual act (*ūha*) which serves the sole purpose of precluding the possibility of the thing being for instance, a mere post, and proceeds on the basis of the cognition of a character belonging to something other than the subject.[7]

It can be seen from the above that the problems which continued to engage the minds of logicians and dialecticians till a later date were discussed even in the time of Uddyotakara, if not earlier. Uddyotakara discusses at length the difference between *tarka* and *anumāna*, and also why *tarka* is not given the status of a distinct *pramāṇa* in the Nyāya school. These problems are discussed elaborately in later works on logic belonging to all the schools of philosophical thought.[8]

Vācaspati is in complete agreement with all that Vātsyāyana and Uddyotakara have said. All the same he stresses that *tarka* indicates that one of the two alternatives is logically impossible and by the method of elimination the remaining alternative is the possible truth, this aspect of elimination being the true contribution of *tarka* which proceeds by the method of *reductio ad absurdum*. *Tarka* operates only when there is doubt on account of two conflicting possibilities arising as claimants to truth *Tarka* enables us to conclude at the very outset that both are not logically possible and then by putting forward considerations against one of the alternatives it enables us to reject what is shown to be logically absurd. The determination of truth is then automatically accomplished by the relevant *pramāṇa* which was hitherto obstructed by the doubt arising from the possibility of two conflicting alternatives. Thus the function

and contribution of *tarka* are of a negative character; it helps the rejection of the false alternative and this contributes towards the determination of truth.[9]

Udayana agrees with Vācaspati that *tarka* serves to eliminate the opposite issue by demonstrating the absurd consequences which follow from the opponent's position. It is by virtue of this that it is mentioned along with *pramāṇa* as fit to be employed in debates. To take an example, a sceptic questions the efficiency of water to quench thirst. To prove that his position is wrong, Udayana says, one would resort to *tarka*. If water did not quench thirst no one would drink water when thirsty. But we find that people drink water to quench thirst and the thirst of all such persons is quenched. Here the *reductio ad absurdum* indicates that the doubt or denial would entail the rejection of a universal practice, an admitted truth. Another variety of it consists in one's having to admit what is contradicted by an accredited *pramāṇa*. Thus if the opponent argues that drinking water causes a burning sensation, the absurdity of the position can be shown by an actual experiment. One can drink water and be satisfied that it does not cause a burning sensation. The position of the opponent is thus rendered invalid by the necessity of having to admit a fact contradicted by valid cognition. *Tarka* can thus be of two types according as it enforces the rejection of an admitted truth or the admission of an absurdity.[10]

According to Vācaspati, *tarka* serves to eliminate doubt and thus removes the obstacle coming in the way of the operation of the relevant *pramāṇa*. Udayana differs here. His contention is that doubt can be removed by crucial evidence alone which *tarka* cannot provide. In the case of the doubt about the existence or non-existence of fire on the hill which has smoke, the doubt is removed by the knowledge of fire through the knowledge of the presence of smoke as concomitant with fire; or in the case of the doubt whether a thing is a man or a post, the doubt can be removed by the perception of the peculiar features of one (viz. man) of the two.

What tarka does is to remove the desire for the knowledge of the opposing alternative (viz. non-existence of fire and existence of post in the above instances) and not doubt. A man wavering between desire for two things cannot do anything till his desire for one of the things is banished by the realisation of an undesired result that would follow from it. For instance, a friend warns a hungry man who is about to start eating that the food is poisoned and he would die if he partook of it. This warning can be logically expressed thus : 'If you take this food, you will die.' The warning serves to dispel the hungry man's desire for the consumption of the food under consideration by indicating the undesirable consequences that would follow.[11] Similarly the actual achievement of *tarka* is the removal of the desire for the knowledge of the opposite alternative, though removal of doubt may ensue as a remote result achieved directly by the definite knowledge accruing from the relevant *pramāṇa*.

Thus according to Udayana the procedure is as follows: A man sees smoke issuing from a hill. He would naturally infer that there is fire and the smoke is due to it Meanwhile he has a doubt regarding the relation of universal concomitance between smoke and fire, the doubt being in the form that smoke may be possible even in the absence of fire. This doubt obstructs the course of inference. Here *tarka* comes to his aid. The man argues that if smoke is not an effect of fire and since it is not known to be an effect of anything else, the smoke would be an uncaused effect—which is an absurdity. The realisation of this absurdity removes the desire for belief in fireless smoke. And the inference that the hill has fire takes place undisturbed and removes doubt.[12] Thus, according to Udayana, doubt is always dispelled by definite knowledge which accrues from the relevant *pramāṇa*, and *tarka* is employed to remove the desire for an enquiry into a false possibility.[13]

We may comment here that though Udayana's line of thinking may be very subtle, that of Vācaspati that *tarka*

eliminates doubt is more readily understandable and acceptable. Vācaspati found a larger following in this respect than Udayana among the later logicians.

Though *tarka* enables one to reject a false conclusion, it is not regarded as a form of inference or as an independent source of knowledge (*pramāṇa*) by the Nyāya school but only as an instrument of negative value in that it serves to show the absurdity of the opposite alternative, and has no direct bearing upon the determination of the truth of a thing or situation, which is determined by an accredited *pramāṇa.* The process of reasoning in *tarka* consists in the deduction of an untenable proposition (*aniṣṭaprasaṅga*) from a certain position. This untenable proposition is a deduction from a hypothesis in the sense that it follows from it according to a general rule. *Tarka,* in fact, satisfies the formal conditions of inference as it is based upon the necessary concomitance between the opponent's position, which serves as the ground (*āpādaka*), and the absurd issue which follows as a consequence (*āpādya*). Suppose someone doubts whether fire is present on the hill where smoke is perceived. This doubt is removed by *tarka* as follows : 'If there were no fire, the smoke also would not be there; (but smoke is actually perceived; therefore there must be fire); this is equivalent to 'There should be absence of smoke in the event of (i.e . because of) there being absence of fire; wherever there is absence of fire there should be absence of smoke...'. To take another illustration, 'If water did not allay thirst no one would drink it for the purpose' is equivalent to "Water should not be drunk because of its not allaying thirst; wherever there is not the allaying of thirst, there should not be the drinking of water...'. Here the arguer knows that the logical ground (*āpādaka*) which is hypostatised, viz. 'If there is no fire' or 'If water does not allay thirst' is false; he is absolutely sure that there is fire or that water allays thirst, but he deliberately takes for granted the opponent's position of there being no fire or of water not allaying thirst and shows it to be false on the strength of the absurd consequence which follows from it. The con-

sequence (*āpādya*) necessarily follows as it is necessarily connected with the ground (*āpādaka*). Thus *tarka* can be said to fulfil the formal conditions of inference. The answer to this is that the element of certainty in knowledge is the crucial point of difference between *tarka* and *anumāna* proper. *Tarka* stops short of reaching the final point of certainty. This, in the view of the Nyāya school, is reached by the apparatus cf *anumāna*. Indian logicians do not generally recognise hypothetical reasoning (*tarka*) as inference as they insist on the truth or objective reality of the terms of an inference and its conditions. In *tarka* the ground (*āpādaka*) which in an inference would be called reason or probans (*liṅga* or *hetu*) is only assumed or knowingly imposed for the sake of argument—(viz. absence of fire and incapacity to allay thirst)—and is therefore false. It is admitted for the sake of argument to serve as a condition or ground (*āpādaka*) showing the absurdity of the opponent's position, by leading to a consequence (*āpādya*) viz. absence of smoke or not drinking of water—which is not accepted even by the opponent. *Tarka* differs from *anumāna* inasmuch as while in the latter the probans must exist in the subject, in *tarka* the probans or logical ground (*āpādaka*) is known by the arguer to be non-existent in the subject and so it would be a case of the fallacy of *svarūpāsiddha hetu* (fallacy of the probans which is non-existent in the subject); again, the non-existence of the probandum (*sādhya*) in the subject constitutes in inference the fallacy of contradicted (*bādhita*) reason; whereas in *tarka* the consequence (*āpādya*) is regarded as an absurdity. The assumption of a false probans makes the admission of a false probandum inevitable, and *tarka* is only thus useful as a *reduction ad absurdum*, the unreality of the probans and of the probandum being its very condition. Therefore, the adherents of the Nyāya school do not accord *tarka* the status of inference or of an independent source of proof (*pramāṇa*).

The author of the *Vaiśeṣika-sūtra* and Praśastapāda do not admit any such '*padārtha*' as *tarka*. Udayana, in his

Kiraṇāvalī (p. 260), places *tarka* under the head of *viparyaya* (erroneous knowledge); and the Mīmāṁsakas and the Buddhists would include it within the fold of inference. The Jainas, on the other hand, regard it as an independent *pramāṇa* (source of knowledge) especially meant to determine the *vyāpti* (rule of universal concomitance between the probans and the probandum) in an inference. Among the Jaina logicians we find Umāsvati using the word *ūha* and *tarka* as synonyms of *īhā* (urge to know), a sub-division of *mati-jñāna* (sensuous cognition).[14] When the Jainas, to fall in with other logicians, formulated their theory of logic which was more practical and in consonance with the logical theories of other schools, Akalaṅka was perhaps the first among them to lay down explicitly the nature, object, etc., of *tarka*.[15] Since then the Jaina logicians have consistently recognised *tarka* as an independent *pramāṇa*. In Jaina logic, *tarka* signifies the organ of the knowledge of *vyāpti*.

Hemacandra has discussed at length the need of admitting *tarka* as an independent *pramāṇa*. *Tarka* (which can be called Inductive Reasoning in the case of the Jaina logicians) is the knowledge of the universal concomitance between two terms which is brought about by observation (i e. valid cognition) and non-cognition (*Upalambhānupalambhanimittaṁ vyāpti-jñānam ūhaḥ* -PM. 1.2.5).[16] Knowledge of *vyāpti* cannot be acquired exclusively from perception. Perception is not competent to perform all the operations that are involved in the knowledge that whatever smoke there is, is invariably an effect of fire in all places and times and not of anything else; the reason is that perception is *avicāraka*, void of the element of thinking, and arises on the strength of the object that is present. Nor can inference obtain for us the knowedge of *vyāpti*, because otherwise the knower would become omniscient like a *yogin*. Even supposing that inference can do so, which of the inferences, the present one or another, cognises this *vyāpti* (universal concomitance) ? If the present, then there would be the fault

of mutual dependence (*itaretarāśraya*), since inference comes into being only after the relevant *vyāpti* has been cognised and the knowledge of *vyāpti* will be acquired only after the emergence of the present inference If it is supposed that the knowledge of *vyāpti* is acquired by another inference, the result would be a vicious infinite series *anavasthā*) as this itself would be possible if the *vyāpti* which makes it possible has been already apprehended: if the knowledge of this *vyāpti* were self-evident, then there should be no reason why the previous one should not be regarded as such; and if the apprehension of the *vyāpti* stands in need of still another inference this would go on infinitely and the *vyāpti* could not be apprehended even in thousands of ages.

The Buddhist's contention is that *nirvikalpa pratyakṣa* (indeterminate) perception is void of the element of thinking or conceptualisation, so it cannot apprehend universal concomitance; but there is no reason why *vikalpa* (conceptual judgement) which follows in its wake should not grasp it.[17] But this is not possible as the *vikalpa* (conceptual judgement) has for its content the same data as are perceived by indeterminate perception. If it (*vikalpa*) were thought to have a different content, it should be regarded as an independent *pramāṇa* over and above perception and inference—the only two *pramāṇas* the Buddhists recognise. This also sets aside the Vaiśeṣika view that the *vikalpa* which works by way of elimination and assimilation is the effect of perceptual cognition and it is this *vikalpa* that secures the knowledge of *vyāpti*. It is not proper to argue that the *vikalpa* in the shape of the knowledge of *vyāpti* is only the result of perception and as such the question of its being a *pramāṇa* (organ of knowledge) does not rise at all. As a matter of fact, though it is a result of a preceptual cognition, it is a condition of a subsequent result in the shape of inference and as such there is no incompatibility in its serving as a *pramāṇa* with respect to inference.

The Naiyāyikas (*Yaugāḥ*) hold that the apprehension of *vyāpti* results from perceptual cognition when aided by *tarka*.

Hemacandra says that when it is admitted by them that the knowledge of *vyāpti* cannot be acquired by perception alone but only when it is aided by *tarka*, it is quite proper to acknowledge that the credit for the apprehension of *vyāpti* goes to *tarka*. What gain could there be by not allowing the credit which is its due to *tarka*, a poor victim of injustice, and exposing perception to the charge of ingratitude involved in denying the obligation of *tarka* which alone renders perception capable of the knowledge of *vyāpti*? There is no valid reason why *tarka* should not be regarded as a *pramāṇa* when it really fulfils the criteria of a *pramāṇa*. It shares with the other accredited *pramāṇas* the criterion of absence of discrepancy or non-deviation (*avyabhicāra*) between knowledge and its object, and it is not true to say that it does not possess a distinctive object of its own since its object is nothing but *vyāpti* itself. Thus, *tarka* or *ūha* is a separate *pramāṇa* which serves to give the knowledge of *vyāpti* (universal concomitance) which is not apprehended by any other *pramāṇa* (*Pramāṇa-Mimāṁsā-Vṛtti*, 1.2.5).[18]

The Jainas were perhaps the first and perhaps the only logicians to give *tarka* the status of a distinct *pramāṇa*. Inference is possible only if there is knowledge of universal concomitance between the middle term and the major term. Perception is limited to things of the present which are within the reach of the sense-organs and cannot cognise remote objects and past and future things. Whatever the sceptic may say regarding the validity of inference as an organ of knowledge, our activities and progress presuppose the infallibility or at least the probability nearing certainty of inference So knowledge of invariable concomitance must be made possible. And it is for the acquisition of such knowledge that the Jaina logicians recognise *tarka* as an organ of knowledge (*pramāṇa*). The pecularity of the Jaina view is that it regards *tarka* as a *pramāṇa* distinct from *anumāna* (inference),

We may now note briefly the views of some thinkers of different schools of thought with regard to *tarka*. According

to Jayanta Bhaṭṭa, *tarka* serves to produce a strong presumption in support of the probandum, and thus diminishes the probability of the opposite alternative.[19] *Tarka* is generally classed under two heads, viz. (*a*) that which clarifies the issue (*viṣaya-pariśodhaka*), (*b*) that which is conducive to the knowledge of the universal concomitance between the probans and the probandum (*vyāpti-grāhaka*).[20] The first variety of *tarka* sponsored by the Naiyāyikas from Vātsyāyana onwards is rejected by Śrīvallabha. He maintains that *tarka* has no bearing upon the object of the *pramāṇas* by means of eliminating doubt, as if a *pramāṇa* is at work, suspicion of the opposite (*viparyaya-śaṅkā*) or a desire to know the opposite (*vipakṣa-jijñāsā*) cannot prevent the rise of knowledge.[21] According to Śrīvallabha, *tarka* serves to eliminate doubt about the infallibility of the relation between two terms, e.g. smoke and fire. One may doubt that the observed association of fire and smoke is only an accidental coincidence. This doubt is removed by *tarka* thus : Smoke is an event and so must have a cause with which it must be universally connected. Smoke is found to be absent wherever fire is absent and fire is invariably found where there is smoke; this two-fold inquiry shows that smoke has fire for its cause *Tarka* takes a hypothetical form, 'If smoke were not necessarily concomitant with fire, it could not be its effect.' If it were not the effect of anything other than fire or of fire, it would be an uncaused effect, which is an absurdity. Thus *tarka* by showing the absurdity of the opposite possibility helps the determination of the observed relation between the middle term (e g. smoke) and the major term (e.g. fire) as an invariable case of causation.[22]

Śrīvallabha seems to have exercised a profound influence on Gaṅgeśa, the author of the *Tattva-cintāmaṇi*. In the chapter on *vyāptigraha* (cognition of universal concomitance between two terms or induction), Gaṅgeśa discusses at length the means of arriving at the knowledge of concomitance Like other Naiyāyikas he says it is made possible by the repeated

knowledge of the co-association of the probans and the probandum, along with the absence of the knowledge of the failure of their concomitance. Besides this there should be the absence of doubt or of the conviction that the said concomitance is only accidental or due to an extraneous condition (*upādhi*). The doubt about the concomitance may also be due to the cognition of common attributes coupled with the absence of the knowledge of specific attributes. For example, because *śabda* and *ākāśa* are alike incorporeal we have a doubt whether *śabda* also is eternal like *ākāśa*. This doubt is removed when we consider that *śabda* is a product and so it cannot be eternal. But the suspicion that the concomitance between two things may be due to an *upādhi*, can be removed only by showing the impossibility of the *upādhi*, and that the concomitance of the things is intrinsic or natural and not an accidental one. *Tarka* dispels such a suspicion by reducing the opposite possibility to absurdity, thus : 'If smoke were not a necessary concomitant of fire it would not be a product of fire which it incontestably is'.[23]

But here an objection can be raised that *tarka* itself is based upon a similar conviction of the necessary concomitance between the *āpādaka* (ground, viz. absence of fire) and the *āpādya* (consequence, viz. denial of smoke being a product of fire); so the case is parallel to other cases of concomitance and is open to doubt and would presuppose another *tarka* which would again be liable to be doubted and require another *tarka* and so on infinitely : Gaṅgeśa's answer to this is that though *tarka* is itself based on concomitance it is not inevitable that one should go on doubting for ever. As Udayana also says the limit of doubt is self-contradiction or a contradiction (*vyāghāta*) of an established or accepted fact; and when doubt is thus eliminated, *tarka* will no longer be necessary. Thus the charge of vicious infinite series (*anavasthā*) is unfounded.[25] The doubt may occur that the relation of smoke and fire is not a necessary one, and if so smoke could be found even in the absence of fire, e.g. in a fireless place like a lake. But

smoke is a product and must have a cause, which may be fire or non-fire, as there is no other alternative. The doubt about smoke being a product or not is precluded by contradiction of an undeniable truth, as it has a definite time of occurrence. That though a product it may be causeless is a case of contradiction, as also that it is a product of some thing other than fire or that it has a plurality of causes, fire and non-fire. Hence smoke is necessarily the product of fire alone. Thus when doubt is set at nought by contradiction, *tarka* can be dispensed with and so the contingency urged has no justification.[25]

Among the different schools of thought, the Jainas, the Rāmānujas and the Mādhvas have accorded to *tarka* the status of a source of knowledge (*pramāṇa*). Veṅkaṭanātha of the Rāmānuja school has shown at length that *tarka* is a *pramāṇa* and a species of inference.[26] Jayatīrtha, a prominent writer of the Mādhva school, in his *Pramāṇapaddhati* classifies inference under two broad heads : (*a*) inference for establishing a conclusion (*sādhanānumāna*), and (*b*) inference for refutation of the opponent's position (*dūṣaṇānumāna*). He divides the latter into two sub-kinds—(*i*) for proof of a defect in the argument employed by the opponent (*duṣṭipramitisādhana*) and (*ii*) *tarka*. The former consists mainly in exposing a fallacy in the opponent's argument, and the latter in answering the objection put forth by the opponent by *reductio ad absurdum*. *Tarka* is thus regarded by Jayatīrtha as a variety of inference for refuting the opponent's position (*duṣaṇānumāna viśeṣa*). He has defined *tarka* as the (enforced) admission of an undesirable contingency necessitated by the admitting of a particular thing or position (*kasyacid dharmasyāṅgīkāre'rthāntarasyāpādanaṁ tarkaḥ*.—PP., pp. 36-37). *Tarka* is a species of inference because it gives rise to indirect knowledge by virtue of necessary concomitance, just like the well-known inference of fire from smoke because of the necessary concomitance between smoke and fire. Only here the probans or ground (*āpādaka*) is an assumed one, which would be regarded as a fallacy in the well-known cases of

inference. Jayatīrtha's contention is that though the actual presence of the probans is generally accepted, it ought not to be regarded as the essential requisite of inference. What is essential is belief in the presence of the probans in the subject and in the case of *tarka* also the opponent believes that the probans in question is present in the subject; and if this probans or ground (*āpādaka*) has the relation of necessary concomitance with the probandum or the consequence (*āpādya*), he must admit the presence of the latter in the subject. Thus, it is to satisfy the opponent that the *āpādaka* is assumed to be present in the subject and so the fallacy of non-existent probans (*svarūpāsiddha*) cannot be urged by the opponent. The conclusion or *āpādya* established by *tarka* is a false one since it does not exist in the subject. This would ordinarily be an instance of the fallacy of the contradicted probans (*bādhita*). Similarly *apasiddhānta* (the acceptance of a position opposed to one's own) can be urged against *tarka* inasmuch as the debater admits, for example, the absence of fire, even though he is aware of the presence of fire. But Jayatīrtha's contention is that these are not defects in *tarka*, though they may be objectionable in the *sādhanānumāna*. *Tarka* is inference of the type called *reductio ad absurdum* and an inadmissible conclusion must necessarily follow from an *āpādaka* the arguer knows to be false; all the same it is just the proper *āpādya* from the said *āpādaka*. In *tarka* the enforced consequence which is absurd shows the necessity of admitting the opposite alternative. *Reductio ad absurdum* and the negative implication of the opposite alternative together constitute *tarka*; and it is as such a whole that it functions as a *pramāṇa*. *Tarka* considered thus in its fulness ends in the proof of a true proposition and so is fully entitled to the status of an accredited *pramāṇa* and comes under inference. It also sometimes aids the operation of the *pramāṇas* by eliminating the possibility of the opposite alternative.[27] Vyāsatirtha endorses the conclusion of Jayatīrtha and follows up his arguments in his *Tarka-tāṇḍava*. Vyāsatīrtha lays stress upon the

categorical nature of the knowledge obtained by means of *tarka*. He defines *tarka* as the valid cognition of the admissibility of the negation of the probans entailed by the admissibility of the negation of the probandum; or the valid cognition of the negation of the probans as the determinant concomitant of the negation of the probandum which is admitted (by the opponent, and for the sake of argument by the proponent).[28] The denial of fire in a hill with smoke amounts to the admission of the negation of smoke; the relation between negation of fire and negation of smoke is one of necessary concomitance and *tarka* brings out this fact, There is thus no reason to deny the status of a *pramāṇa* to *tarka*, and it is a variety of inference as it operates through the knowledge of *vyāpti*.[29] Vyāsatīrtha's contention is that the hypothetical form of the proposition in a *tarka* does not imply that the proposition does not assert a categorical truth. As a matter of fact, the *vyāpti* between two sets of facts is usually stated in a hypothetical form, as for instance, 'If there is smoke there must be fire'; yet it does not speak of a tentative possibility but asserts a universal truth. He further contends that negation of fire—the *āpādaka*—is asserted by the opponent to be true of a hill, and negation of smoke—the *āpādya*—is asserted by the arguer as the consequence the opponent must admit in relation to the hill, [1] so the minor premiss and the conclusion in a *tarka* are not unreal (*asiddha*) as the Naiyāyikas hold.[30]

We may now briefly note the views of Śrīdhara and Vyomaśiva, two well known *ācāryas* of the Vaiśeṣika school. Śrīdhara, after a brief presentation of the views of the older Naiyāyikas regarding *tarka*, including the instance cited by them of metempsychosis and emancipation becoming impossible if the soul be regarded as having an origin, asks : What is the nature of *tarka* ? Is it knowledge of the impossibility of the opposite alternative ? Or is it a presumption in favour of one's position ? On the first alternative, *tarka* must be

[1] If there were no fire on the hill there would be no smoke noth ehill.'

held to be a *pramāṇa* because otherwise its contention (e.g. there could not be smoke if there were not fire) would be invalid and the opposite alternative admitted by the opponent could not be shown to be impossible, and consequently inference also could not prove its own conclusion. If however it is held that the opponent's position is validly confuted by *tarka* and the consequence of it is shown to be absurd, then *tarka* must be subsumed under an accredited *pramāṇa* whether it be perception (*pratyakṣa*) or inference (*anumāna*). It is thus an instrument for proving the impossibility of the position advocated by the opponent and as such has all the characteristics of inference. *Tarka* proves the absurdity by means of a logical probans and the *vyāpti* between the probans and the probandum. It is therefore nothing but inference. If the second alternative be accepted there would be the fault of *anyonyāśraya* (mutual dependence) as the *pramāṇas* determining their object are said to operate after the way has been cleared by *tarka* and here *anumāna* would have to be regarded as the cause of *tarka* in the form of presumption in favour of one's own view. The Naiyāyika must admit that whether as an independent instrument for establishing the logical ground or as an auxiliary condition, *tarka* has validity of its own, otherwise it could not prove or disprove anything.[31] Vyomaśiva's arguments are similar to those of Śrīdhara. *Tarka* can eliminate the possibility of the opposite alternative or the desire to know it, only if it succeeds in giving a valid assurance that it is logically impossible and unjustifiable. This it can do only if it were of the nature of *nirṇaya* (decisive knowledge). As such it must be subsumed under either perception or inference.[32]

To summarise, the Naiyāyikas generally deny validity to *tarka*. The Jainas, the Rāmānujas, the Mādhvas, Śrīdhara and Vyomaśiva regard it as a source of valid knowledge Of these the Jainas regard it as a distinct *pramāṇa* while the others subsume it under inference. *Tarka* is useful in debates inasmuch

as it would show the absurdity of the opponent's position and thereby clear the way for the proponent's reasoning. It would also establish the relation of invariable concomitance between the middle term and the major term in the event of its being doubted by the opponent. One might say *tarka* would be especially useful in answering the *jāti* type of arguments.

What is still more important is that the subdivisions of *tarka* provide, along with the conditions of valid reasoning, the *hetvābhāsas* and some of the *nigrahasthānas*, the commonly accepted principles of dialectical criticism. Though thinkers may differ as regards *tarka* being an independent source of valid knowledge or not, yet they are agreed as to its usefulness in proving the absurdity of the opponent's position or the objection raised by him; that is to say, in spotting where he falters. The different faults which reduced the opponent's position to absurdity, when detected, gave birth to so many principles of dialectical criticism strictly recommending the avoiding of these weaknesses and faults in argument. We are interested in this aspect of the sub-varieties of *tarka* as they provide the basis and criteria of dialectical criticism in Indian thought in general.

Classification of *Tarka* and commonly accepted principles of Dialectical Criticism

Udayana has, in his *Ātmatattvaviveka* classified *tarka* under five heads :—(1) *ātmāśraya*-self-dependence, (2) *itaretarāśraya* (also termed *anyonyāśraya*)—mutual dependence, (3) *cakraka*-vicious circle or argument in a circle, (4) *anavasthā*—vicious infinite series, (5) *aniṣṭaprasaṅga—reductio ad absurdum*, entailing of a contingency.[33] Varadarāja following Udayana gives the same classification in his *Tārkika-rakṣā* (p. 186); and so also Viśvanātha in his *Vṛtti* on the *Nyāya-sūtra* 1.1.40. Viśvanātha has however mentioned other varieties of *tarka* as propounded by other logicians though he himself does not accept these as genuine cases of *tarka*. These are (1) *prathamopasthitava*, initial presentation, (2) *utsarga*, general rule (—Prof.

Bagchi renders it as conventional or empirical induction), (3) *vinigamanāviraha*, absence of decisive proof, (4) *lāghava*, parsimony or simplicity, (5) *gaurava*, complexity or clumsiness. Viśvanātha does not accept these as genuine cases of *tarka* inasmuch as they do not enforce an undesirable consequence, which is an essential characteristic of *tarka*; they have been set forth as instances of *tarka* on the ground of their serving as auxiliaries to an accredited *pramāṇa*. *Tarka* has been used as the symbol of the number six, and the expression *saṭ-tarkī* (six-fold *tarka*) which is widely current in philosophical parlance is also an indication of the six-fold classification of *tarka*[33] So there must be a sixth variety of *tarka*, though it is not mentioned by Udayana. We find this sixth variety in Śrīharṣa's *Khaṇḍana-khaṇḍa-khādya*, viz. *pratibandī* (*tu quoque* or recrimination), though *vyāghāta* (contradiction) is mentioned there instead of *aniṣṭaprasaṅga*[35]. This is not an original formulation of Śrīharṣa's but only a restatement of that of some adherent of the Nyāya school who perhaps existed some time after Udayana.

We do no find any sort of classification of *tarka* in *Nyāya-sūtra*, *Bhāṣya*, *Vārttika* and *Tātparya-Ṭīkā*. Udayana seems to speak of the five-fold classification for the first time in his *Ātmatattvaviveka*. It may be mentioned that though *aniṣṭa-prasaṅga* (*reductio ad absurdum*) has been mentioned by Udayana as a variety of *tarka*, this is not logically justifiable as the urging of an undesirable consequence is the general character of *tarka* and so should not be regarded as a special variety of it. Śrīharṣa has therefore stated the first four varieties mentioned by Udayana and completed the list by adding two other varieties, viz. *vyāghāta* (contradiction) and *pratibandī* (*tu quoque*). Śaṅkara Miśra in his *Vādivinoda* (p. 19) has given almost the same classification as Udayana's; only he has wisely named the fifth variety *taditarāniṣṭa-prasaṅga* (emergence of an absurdity other than those involved in the cases mentioned before). Perhaps this is what Udayana himself intended. Veṅkaṭanātha of the Rāmānuja school has followed

Udayana except that he calls, perhaps to save the position, the last variety *kevalāniṣṭa-prasaṅga* (pure *reductio ad absurdum*) though this can hardly be said to be any considerable improvement on the original scheme. In the *Prajñāparitrāṇa*, a work of the Rāmānuja school, *kevalāniṣṭa-prasaṅga* has been divided into two sub-varieties—*virodha* (opposition) and *asambhava* (impossibility).[36] Veṅkaṭanātha has referred to three other varieties, viz. *pratibandī* (*tu quoque*), *samavacana* (equalisation) and *ubhayataḥśpāśā* (double noose). Śrīnivāsa, the commentator of the *Nyāya-pariśuddhi* refers to two more varieties, viz. *gaurava* (clumsiness) and *lāghava* (parsimony).

Śrīharṣa has referred to five other varieties of *tarka* in addition to the six noticed above. These are (1) *avinigama* (*vinigamanāviraha*), absence of decisive proof, (2) *utsarga*, (3) *kalpanā-gaurava* (complexity of hypotheses). (4) *kalpanā lāghava* (parsimony of hypothesis), (5) *anaucitya*, impertinence (or *vaiyātya*, impudence). He seems to regard these as having the same status as *ātmāśraya* and the rest, because they have the general character of *tarka*, viz. *reductio ad absurdum* and because they cannot be included under any of these recognised varieties on account of difference of content.[37] Thus, Śrīharṣa has given eleven varieties of *tarka*. Śaṅkara Miśra in his commentary on the *Khaṇḍana-khaṇḍa-khādya* states that these are regarded as additional varieties as they are *tarka-pratirūpaka* (simulators of *tarka*), and not as orthodox instances.[38] Yet in his *Vādivinoda*, Śaṅkara Miśra opines that though there is difference of opinion with regard to these varieties, as to whether they are simulations of *tarka*, or are genuine cases of it, it is proper that these should be regarded as legitimate varieties of *tarka* because they cannot be included under any of the accepted varieties.[39] It can be seen that the logicians are trying to somehow accommodate *lāghava*, *gaurava*, etc. which were employed in standard works as principles of dialectical criticism within the logical frame-work of topics. The *Sarvadarśana-saṅgraha* (pp. 238-239) gives an additional variety, viz. *apavāda* (exception), but this does

not find corroboration in any of the text-books of logic and is not explained in the *Sarvadarśana-saṅgraha* itself. But it may also be observed that *apavāda* (exception) is mentioned alongside with *utsarga* (general rule) as its contrary. We also find *atiprasaṅga* (absurd over-extension) very frequently employed in works of a dialectical character.

We may now give a brief exposition of these, mainly on the basis of the definitions given by Śrīharṣa. Śrīharṣa is the first to give a formal exposition of these varieties of *tarka*, though Udayana has before him given the names of the first five varieties.

(1) *Ātmāśraya* (self-dependence)– *svasyā'vyavahitāpekṣaṇam ātmāśrayaḥ* (KhKh., p. 705) — When a thing directly and immediately presupposes itself in respect of origination (*utpatti*), subsistence (*sthiti*) and cognition (*jñapti*) it is a case of *ātmāśraya*. The expression 'directly and immediately (*avyavahita*)' precludes the extension of the definition of *ātmāśraya* to *anyonyāśraya* (mutual dependence) and *cakraka* (vicious circle), in which also a thing presupposes itself but mediately and indirectly. If it is argued that X is the cause of X. that is to say, of its own self, it is an instance of *ātmāśraya* in respect of origination. X would thus be split up into two non identical entities since causation requires at least two factors. The same entity then should be either prior to or later than itself. If it be argued that colour subsists in its own self, or that it is its own container and content, the colour would similarly be split up into two entities and it would be a case of *ātmāśraya* in respect of subsistence. If colour were to be a substrate, it would be a substance, but in no case would it be a quality. It would be an instance of *ātmāśraya* in respect of cognition if it be argued that X for its cognition presupposes the cognition of itself. The cognition could never take place because the same thing (the cognition of X) cannot be the condition presupposed and the result brought about by it [40] If the cognition of jar were to produce cognition in respect of jar then it could not be produced at

the time of the rise of its cognition. It can be seen that the case of *ātmāśraya* in respect of cognition is but a case of *ātmāśraya* in respect of origination—cognition of X depends for its origination on the cognition of X. This is true also of *anyonyāśraya* in respect of cognition.

(2) *Anyonyāśraya* (mutual dependence)—*anyonyasyāvyavahitānyonyāpekṣitvam anyonyāśrayaḥ.* (KhKh., p 705). It is an instance of *anyonyāśraya* when two things or terms presuppose each other immediately and directly in respect of origination, subsistence or cognition. 'Immediately and directly' prevents the definition from applying to *cakraka* (vicious circle). For instance, *jñāna* is defined as that which is possessed of *jñānatva* and *jñānatva* as that which resides in *jñāna;* here *jñāna* and *jñānatva* depend upon each other for their cognition, as either for its cognition depends on the cognition of the other.

(3) *Cakraka* (argument in a circle or vicious circle)—*antaritasya tad eva dvayam ātmāśrayo'nyonyāśrayaś cakrakam* (KhKh., p. 705). When one and the same term is said to require its own self for origination, subsistence and cognition through the intervention of two or more terms, this gives rise to argument in a vicious circle (*cakraka*). This also arises when of two terms, the first requires the second and the second requires the first through the intervention of a third or a fourth. For instance, if this jar were produced by an effect of this jar then it should not exist when this jar was produced; similarly if this jar were the producer of the producer of the producer of this jar, then it should subsist prior to the producer of the producer of this jar—which is absurd (VV, p. 20). Some one asks 'What is *jñāna* ?' Another answers 'That which is prossessed of *jñānatva*'. Again the former asks, 'What is *jñānatva* ?' and the second answers, 'It it is a *jāti* (universal) not subsisting in pleasure, pain, etc. but subsisting in a special attribute of the *ātman* (soul)'. 'But what is *jāti* ? 'It is a particular or uncommon cause giving rise to the knowledge (*jñāna*) which makes possible the

classification of a number of individuals under one genus.' This is an instance of *cakraka* (argument in a circle) as *jñāna* is asserted as the proof of *jāti* and only if *jāti* is proved or known can the particular *jāti jñānatva* be known and only when *jñānatva* is known, *jñāna* is known. Thus *jñāna* depends on itself for its own cognition through the intervention of two or more other terms or factors. The chain of intervening terms may be extended indefinitely but the last one must be identical with the first one, that is to say, it must be a closed series.[41]

(4) *Anavasthā* (vicious infinite series)--*Upapādyopapādakapravāho'navadhir anavasthā*--(KhKh., p. 706) The continuity of the series of probans and probandum or of ground and consequent without limit constitutes the vicious infinite series. If this continuity is endorsed by the accredited *pramāṇas*, it ceases to be vicious, and can be called a valid or legitimate (*prāmāṇikī*) infinite series. Śrīharṣa has spoken of two infinite series--*regressus ad infinitum (adhodhāvantī anavasthā)* and *progressus ad infinitum (ūrdhvaṁ dhavantī anavasthā)*.[42] If it is held that a thing can be known by means of a *pramāṇa* and this *pramāṇa* can be effective only if it is known, then this presupposes another *pramāṇa* (cognitive instrument) and so on infinitely. This gives rise to a vicious *adhodhāvantī anavasthā*. If we were to stop at some *pramāṇa* (instrument of cognition), that is to say, if we were to suppose that some instrument of cognition remains uncognised the result would be that no cognition would arise as it was postulated that only a cognised instrument could make anything known. The result would be the failure of the cognition of the matter in hand. On the other hand, if the series of instruments and their cognitions were pushed back indefinitely, the same incongruity would arise and no justification of the cognition would be possible. The infinite series fails to explain the datum, the necessity of which impelled us to postulate the series as there is no last term which could justify or establish the original datum through the intervening links. No knowledge could thus be possible.

We may now consider an instance of *ūrdhvaṁ dhāvantī anavasthā*. The Naiyāyika holds that a definition is indispensable for the understanding of the nature of a thing. Earth is accordingly defined as a substance possessed of smell which is its special characteristic. But then smell would have to be defined by its special characteristic and this latter again by its special characteristic and so on infinitely. Thus one definition necessitates an unending series of definitions with the result that the original datum remains undefined.

But all infinite series are not vicious. If there is some datum which is established by independent logical proof then the infinite series that arises in connection with it will not affect the validity of the original proposition and so will not be vicious (*pramāṇa-siddha-pravāha-prasaktis tu anavasthābhāsaḥ* – NP., p. 346). The case of the series of seed and sprout is a case of legitimate *adhodhāvantī anavasthā*. The seed is the cause of the sprout and the sprout that of the seed. But we know by the joint method of concomitance in presence and absence that the seed when planted in congenial soil produces the sprout and the sprout in its turn eventually generates the seed. Therefore though we may say that a seed is the cause of a sprout and a sprout of a seed and the chain of these links of causes and effects is pursued infinitely in the past, yet the causal relation between a particular seed and a particular sprout is independently established by a *pramāṇa*. It would have been a vicious series if the same individual seed and the same individual sprout were required to function as cause and effect alternately. But the pairs of cause and effect are numerically different at each time and so there is no mutual dependence. Dr. Bagchi says, "The fact that the series is extended over the three divisions of time, the past, present and future, is due to the fact that the history of the physical world is an uninterrupted course of events to which we cannot set an arbitrary limit."[43]

The following is an instance of a legitimate *ūrdhvaṁ dhāvantī anavasthā*. Earth has smell. Here smell as it belongs to earth

generates a relation between itself and earth otherwise it cannot belong to it. Thus earth has not only smell as a quality but also the attribute or quality of relatedness to smell. This quality must again generate a relation between itself and earth, because a quality can belong to the subject only if it is related to it, and this relation again the attribute of relatedness and and so on infinitely. In this way the chain of qualities and relations will be generated infinitely. But this infinite series will not invalidate the original proposition "Earth has smell", because the quality and the relation involved is not in any way dependent in respect of origination, subsistence and cognition upon the progressive series of qualities and relations that will be generated.

The *Nyāya-pariśuddhi* (p. 346) gives the following illustration of a legitimate infinite series. An effect requires a causal aggregate (*sāmagrī*) for its production, but this *sāmagrī* also has its own *sāmagrī* and so on infinitely. But this infinite series is not vicious because no *pramāṇa* is contradicted thereby and we find that the production of the succeeding effect is not affected thereby. Similarly in the case of ubiquitous substances, which are limited by various *upādhis* (adjuncts), even if an infinite number of parts owing to length, expanse, density be there, the concept of the substance or of its parts thus posited is not affected thereby--so we will not be forced to concede that (on our own logic) all limited-sized substances will turn out to be substances possessed of an unlimited size. Otherwise, since even in the case of the ordinary limited-sized substances, an infinite number of parts can be posited in a precisely similar fashion, the concept of even these substances will have to be treated as suffering from the fault of infinite series. As a matter of fact, if it is denied that a part along with its own absence can reside in the same locus, then everything will have to be treated as ubiquitous (—it being the opponent's position that in the case of the ubiquitous substances it is illogical to posit a part that resides in this substance

along with its own absence). Hence no fault of *anavasthā* is implied in a substance being regarded as having infinite parts due to being limited by an infinite number of *upādhis* as this is what is supported by *pramāṇa*.

(5) *Taditarāniṣṭa-prasaṅga* or *Kevalāniṣṭa-prasaṅga*—all cases of *reductio ad absurdum* other than these, viz. acceptance of what is not supported by proof and rejection of what is supported by logical proof—which is the general character of all *tarka*. But *Prajñā-paritrāṇa* subdivides *kevalāniṣṭa-prasaṅga* as *asambhava* and *virodha*. What is not established by any of the accredited *pramāṇas* is *asambhava*, an impossibility, e.g. horn emerging on the hare's head. Contradiction of one's own words is *virodha*, e.g. 'My mother is barren'.[44]

(6) *Vyāghāta* (contradiction)–*viruddha-samuccayo vyāghātaḥ* (KhKh., p. 705). It consists in the admission of two mutually opposed attributes in one entity at one time, e.g. My mother is barren. *Vyāghāta* admits of classification under three heads: (i) *Svavacana-vyāghāta*, contradiction in language, e.g., 'My mother is barren'; (ii) *Svakriyā-virodha*, contradiction in action e.g. saying 'I am dumb'; (iii) *Svajñāna-vyāghāta*, contradiction in thought, e.g. 'I do not know this jar' (*Ātmatattva-viveka*, p. 232). In the first variety, the proposition predicates two opposed attributes (e.g. productivity which is connoted by 'mother' and non-productivity) in respect of the same subject and in the same reference. In the second variety the very act of assertion proves the falsity of the predicate 'dumbness'. This should not be confounded with contradiction in language. There is no contradiction involved in the proposition in the written form, it is only articulation which gives rise to the contradiction. In the third variety, the very thought or assertion of the particular object ('this jar') presupposes its knowledge and so the assertion of the lack of knowledge of the jar contradicts the person's knowledge of it which is the presupposition of the assertion. It should be borne in mind that the pronoun (in 'I do not know this') or the pronominal adjective 'this' (e.g. in 'I do not know

this jar') indicates direct knowledge of it and so the assertion of ignorance of it is clearly a case of self-contradiction in thought. But for the '**this**', the assertion would be faultless.

(7) *Pratibandī* (*Tu quoque* argument)—*Svābhyupagata-doṣa-tulyatā pratibandī* (KhKh., p. 706). This arises when the arguer does not refute the objection pertaining to an undesired contingency raised by the opponent but ascribes the same consequence to the opponent. For instance, suppose the Kevalādvaitin proves the unreality of the world and the opponent without refuting the Vedāntin's argument urges that if the world were unreal, Brahman also would be unreal.[45] This is a case of *pratibandī*. The opponent almost admits the validity of the Vedāntin's argument The legitimate course of action would be to expose the weakness of the Vedāntin's argument. The mere urging of an unacceptable contingency has as a matter of fact, no logical cogency.

Śrīharṣa refers to a striking example of *pratibandī* in the *Nyāya-Vārttika* of Uddyotakara. The Naiyāyika contends that a positve effect inheres in its material cause, and thus the material cause must exist in the antecedent moment and also in the moment in which the effect is produced. Thus things can not be momentary, otherwise a product will have no support The Buddhist says in reply that it is not a logical necessity that an effect must have a support to inhere in. The Naiyāyika retorts that the Buddhist cannot cite any example by way of demonstration of this that an effect need not have a support to inhere in The Buddhist answers that the absence of an approved example cannot be a fault. The Naiyāyika also cannot put forward any example, acceptable to both the parties, of a product necessarily having a material support. Uddyotakara observes that this is no argument at all inasmuch as it amounts to the admission by the Buddhist of the truth of the charge brought against him; and this admission is sufficient to condemn the opponent's position. (*samānam ity anuttaram abhyupagamāt. abhyupagataṁ tāvad bhavatā nā'smatpakṣe dṛṣṭānta iti.*—NV., II.1.16, p. 195). Śrīharṣa thinks that the upshot f *tar'vyzivo* thsr

pratibandi is the demonstration of the equality of both the parties; their positions are equally open to the same kind of objection. As Kumārila says, where both the positions are open to objections of equal gravity and their solution is of equal value, one of the parties should not be singled out for condemnation. Usually the Naiyāyika's contention is that the burden of proof lies on the opponent and as he fails to establish his position by an independent argument, the opponent alone should be convicted of failure. Kumārila and Śrīharṣa are of the view that the two parties in such a situation should be held to be in the same precarious position.[46]

(8) *Avinigama* or *Vinigamanāviraha* (absence of decisive proof)—*Vikalpenānvayāvagamayogye ekasminnabhyupagate tadekadeśānvaya-niyama-nirdhāraṇāśakyatvam avinigamaḥ*. (—KhKh., p. 718). When more than one alternative are possible and the balance of evidence is equally distributed between them, the acceptance of one of them to the rejection of the other is open to the charge of *avinigama*. For instance, it is an important problem in the Vaiśeṣika philosophy, whether *bhūtatva* (being an element, elementality) and *mūrtatva* (corporeality, having a limited dimension) can be regarded as *jāti* or *sāmānya* (universal, class-character). Independently they are claimants to the status of *jāti* as they are found to occur in a number of things—the former belongs to earth, water, fire, air, ether and the latter also belongs to a number of substances including the first four elements and the mind which is regarded as atomic by the Vaiśeṣika school. But the Vaiśeṣika holds that two universals can co-exist only if they are related as genus and species or as more extensive and less extensive; for instance *dravyatva* (substance-universal) is more extensive than *pṛthvītva* (earth-universal). If two generic attributes are not related as higher and lower in the sense of genus and species they are not regarded as class-character or universal in the true sense of the term. If the possibility of occasional independent occurrence and occasional co-existence of two universals is admitted then the co-existence of cow-universal and horse-universal cannot be ruled

out as a logical impossibility. On the strength of this criterion *bhūtatva* and *mūrtatva* are not regarded as universals because they are not related as higher and lower.[47] The mind though having a limited magnitude is not an element, and the ether though an element is not possessed of limited magnitude. Thus the two exclude each other as far as their incidence in mind and ether are concerned and since they fail to satisfy the rule of the co-existence of universals that they should be related as higher and lower, they cannot be regarded as universals. Now if one is admitted as a universal on the ground that it is found to be present in a number of things, there is no reason why the other also should not be accepted as such as there is no ground for preferential treatment When both of them cannot be accepted as universals, neither should be given any special treatment. The case under consideration is on a par with that of two counter-balanced arguments where also there is no special reason why one should be favoured to the exclusion of the other, and so they cancel each other. (*Satpratipakṣahetvor iva nirdhārayitum aśakyānvayayoḥ paraspara-pratikṣepa eva paryavasānāt.*—KhKh., p. 718).

It may be urged that absence of decisive proof is nothing but absence of *pramāṇa* (*Nanu evaṁ pramāṇābhāva eva doṣaḥ syān nā' vinigama iti cet*-KhKh., p. 718), and so it is not necessary to recognise absence of decisive proof as a distinct variety of *tarka*. This cannot be accepted. It is true that absence of decisive proof indicates the absence of valid cogntion by a legitimate *pramāṇa*, but they are not one and the same. Absence of decisive proof occurs to us first and this leads to the conclusion that there is no *pramāṇa* to certify the truth of the alternatives in question. It is, therefore, proper that we accept *avinigama* as the ground of our rejection of the alternatives in question, and not misunderstand it as a case of *pramāṇābhāva* (default of cognitive instrument) which is rather known by means of it (*tasyāvinigamonneyatvenā'vinigamasyaiva prathamotpannasyopanyāsaucityāt.*—KhKh., p. 719). Now it may be urged that when fire is inferred from the cognition of smoke, we cannot say that

the fire is of grass or of leaves. There is no *pramāṇa* to decide in favour of either view. Therefore *avinigama* is only *pramāṇābhāva* and if non-decisive proof be regarded as a fault, all inferences should be regarded as faulty inasmuch as they do not give any knowledge of specific individuals. The answer to this argument is that inference is accepted as a proof in respect of fire-universal, so it cannot be regarded as faulty (See VV., p. 38)

(9) *Utsarga* (general rule or empirical induction)—*Bāhulya-dṛṣṭam apekṣya bāhulyadṛṣṭatayā durbalasyā'nupagamārhato-tsargaḥ*—KhKh., p. 719).[48] When two contradictory predicates may be conceivable with regard to one thing on *a priori* grounds and the balance of logical proof is equally shared between them it is the general tendency of the human mind to accept what is endorsed by experience as yet uncontradicted and to reject the weaker one for which there is no proper support of experience. We regard fire as hot but there is no reason why it cannot be regarded as cold. The logical necessity of 'hotness' as a predicate of fire or the logical impossibilty of 'coldness' as such cannot be proved by logic; our only ground for belief in the proposition 'Fire is hot' is our experience, both collective and individual.

It is an innate tendency of the human mind to accept the truth of a proposition which is confirmed by experience unless and until it comes across empirical evidence contradicting the truth of it. These empirical inductions can be ultimately traced to our belief in the law of uniformity of Nature and faith in conventional practice. We have discussed this earlier in connection with *vyāpti* This is true of all general rules pertaining to grammar and the like branches of knowledge. Sceptics raise an uproar against this blind belief as they would call it, which is not supported by sufficient evidence. There is no proof that fire is not cold at some place, at some time in the past, present or future. But it is the general tendency to accept the truth of cognition and act according to its inspiration unless and until there is co..tradictory evidence. Accordingly, the Mīmāṁsakas

accept all judgements to be true, unless a contrary evidence showing a defect in the apparatus of knowledge or a subsequent contradiction by another accredited experience presents itself to set aside their claim to truth.[49]

It may be urged that these general rules (*utsarga*) are of the nature of doubt, their only difference from pronounced cases of doubt being that they are concentrated on one possible alternative which appears stronger and do not vacillate between two alternatives of equal strength like the latter; they show only a high degree of probability. (*Nanu balavad ekakoṭikaḥ saṁśaya evotsargas tat kathaṁ tarkaḥ syād iti cet* —KhKh., p. 719). This is not true. Such *utsargas* or inductions serve as positive evidence in favour of the possibility of a thing whereas doubt does not act as such. Secondly, *utsarga* is of the nature of an unilateral cognition of one of the extremes, whereas doubt vacillates between two competing alternatives.

We may note a trait of *utsarga* which differentiates it from the other varieties of *tarka*. *Utsarga* serves to prove a position by an appeal to non-contradiction and the refutation of the opponent's position follows. On the other hand, *ātmāśraya*, etc. are primarily concerned with the rebuttal of the opponent's position and their cogency is derived from the absurdity or contradiction involved in them. As Dr. Bagchi says : "Non-contradiction is the main plank on which empirical induction relies for its cogency, whereas the other types depend upon the contradiction arising from their application. The fundamental characteristic of reasoning (*tarka*) operating as *reductio ad absurdum* is also present in it, since by proving its position it serves as an instrument of the disproof of the opponent's plea indirectly."[50]

(10) *Apavāda* (exception)—This is the reverse of *utsarga*. It is found mentioned as a variety of *tarka* in the *Sarvadarśana-saṅgraha* alone, where also it is not explained. All the same it is mentioned as early as Patañjali's *Mahābhāṣya* along with *utsarga*, the latter signifying a general rule and

the former an exception to it. But we cannot definitely say how *apavāda* served as a *tarka*, unless it be that it was put forth as an answer to the opponent's stand on the ground of a general rule.

(11–12). *Gaurava* (complexity) and *lāghava* (simplicity or parsimony)—*Sugamāsugamayor asugamadurbalatvaṁ kalpanā-gauravam..... dūṣaṇānukūlam idaṁ tadvyatirekeṇa kalpanā-lāghavaṁ sādhanānukūlam.*(—KhKh, p. 721). When between the alternative hypotheses one involves complexity and as such is difficult to understand and the other is simple and as such easily intelligible, the former is liable to condemnation and the latter is entitled to preference. The ground of condemnation lies in its complexity and that of preference in simplicity. It must be borne in mind that these considerations weigh only when the balance of logical support is equally present. A theory cannot be condemned merely on the ground of its complexity, if this complexity is entailed by logical necessity. Similarly, a theory is not to be commended only on the ground of its simplicity, unless the theory even though simple establishes itself reasonably. *Gaurava* (complexity) and *lāghava* (simplicity) may be due to qualitative and quantitative considerations. A hypothesis which is hard to comprehend is liable to the charge of qualitative complexity if a simpler hypothesis is available and is found to be equally efficient. Similarly, when a fewer number of terms can account for a situation, the postulation of a larger number will constitute quantitative complexity. The Naiyāyika's argument proving the existence of one God as the creator of the world on the ground of its being a product, is supported by this type of *tarka*. It has been urged by the opponent that if the world is a product and should have an intelligent creator, there is no reason why a number of agents should not be postulated on the analogy of the building of houses, etc. The Naiyāyika answers this by an appeal to the quantitative difference between complexity and simplicity. If a number of agents be postulated, again one controller of these would have to be postulated to prevent

disorder and chaos in the world due to the personal whims of these numerous agents. Instead, it is simpler to postulate the existence of God alone as the creator of the world. The postulation of a plurality of agents is more complex than that of one, so the law of simplicity (*lāghava*) requires that monotheism be preferred to polytheism. Similarly, from the point of view of qualitative simplicity and complexity we are asked to discount supernatural factors and give preference to a natural explanation. As the Mīmāṁsakas recommend, one should resort to *adṛṣṭa* (unseen) only when no visible cause or reason can be found for a thing. Simplicity is thus used as a consideration in support of one's position and complexity is urged as a fault against the opponent.[51]

The Naiyāyikas have distinguished three varieties of *lāghava* from the corresponding ones of *gaurava*. *Lāghava* and *gaurava* may be (*a*) in respect of form (*śarīrakṛtam*), (*b*) in respect of presentation (*upasthiti-kṛtam*) and (*c*) in respect of relation (*sambandhakṛtam*).[52] To give illustrations, (*a*) extensity (*mahattva*) is regarded as the condition of perceivability. Others hold that the attribute of being inherent in more than one substance (*anekadravya-samavetatva*) is the condition. Extensity is simpler in form than inherence in more than one substance and hence is preferred to the latter. These are instances of *lāghava* and *gaurava* in respect of form (*śarīra*). (*b*) The effect must be non-existent before its production; the *prāgabhāva* (prior negation) of the effect is a condition precedent to its production. Now we find that the production of odour is concomitant with the production of colour; so the production of odour must be preceded by both the *prāgabhāva* of colour as well as that of odour. But of the two *prāgabhāvas*, the *prāgabhāva* of odour should be regarded as the condition of the production of odour because it presents itself readily to the mind, for while enquiring about the causes of odour, the *prāgabhāva* of odour is more relevant than that of colour. Here the *lāghava* lies in the promptness with which the idea of the *prāgabhāva*

of odour comes to our mind, and the *gaurava* in the belated occurrence of the idea of the *prāgabhāva* of colour. These are instances of *lāghava* and *gaurava* in respect of presentation. (*c*) Coming to the third variety, we know that a staff (*daṇḍa*) is the antecedent of the making of a jar. But the colour of the staff and the staffness (or staff-universal) are equally antecedent to it. Yet it is the staff that is to be regarded as the causal condition of a jar whereas neither of the other two can be regarded as such because the latter would make the causal relationship more cumbrous (*guru*) as compared to the former. It is an accepted postulate that the cause and the effect must be intimately related and that the effect should occur only where the cause is operating. There is no difficulty in regarding the staff as the causal condition of the making of a jar; whereas if the colour or the universal of the staff is regarded as the causal condition, the relationship will be cumbrous, because they can be related to the effect only through their inherence in the staff. If we regard the staff as the cause, the relation will be *sva-saṁyuktatva* or *saṁyoga* (conjunction), whereas if colour or universal of staff is regarded as the causal condition, the relation will be *svāśraya-saṁyuktatva* or *svāśraya-saṁyoga* (conjunction through the substrate). The causality of the staff is found to be less complex, and is therefore admitted on the ground of simplicity (*lāghava*) of relation, and the case under consideration illustrates relational simplicity (*lāghava*) and complexity (*gaurava*).

(13) *Prathamopasthitatva* (initial presentation) which was regarded as a variety of *tarka* by some logicians as can be seen from the statement of Viśvanātha in his *Nyāyasūtravṛtti* 1.1.40, seems to be the same as *upasthitikṛta-lāghava* though it might have been more general in character. It is an accepted convention that we should not reject what presents itself first unless there is strong evidence against it. It is based on the truth that nothing should be condemned unless there is strong reason for it.

(14) *Vaiyātya* (impudence) or *Anaucitya* (impertinence)—*Prāmāṇikāvyavahāryatvam asamādheyajātīyam anaucityaṁ*

vaijātyanāmakam—(KhKh., pp. 721-722). It consists in saying something which is not endorsed by logical proof and is not capable of being justified or refuted on account of its absurdity, that is to say, in saying something which does not deserve to be answered. An honest error though absurd can be refuted or corrected, and as such is not a case of impertinence. Suppose a man multiplies question upon question indefinitely. If this is not brought to an end, no discussion would be fruitful. Therefore, it is a recognised rule of debate that questioning should be confined to relevant issues, irrelevant digression being a fault. But the fault of impertinence is not just irrelevant digression (*arthāntara*) alone. If one seeks to silence an obstinate arguer by the charge of irrelevancy, the latter may ask, 'What is irrelevancy?' and each answer may be made the subject-matter of a question. This interminable prolongation of the series can be stopped only if a 'check' is applied to it. Impertience is the ground of this application of 'check'. Or an arguer may ask, 'What is *dravya*?' When told that it is possessed of qualities (*guṇa*), he would ask, 'What is a *guṇa*' and so on indefinitely, when he cannot be accused straightaway of *arthāntara*. In such a case, the 'check' can be applied on the ground of *anaucitya* (impertinence).[53]

Again, the question, 'Is non-entity real or unreal' does not deserve an answer; the assertion of either reality or unreality would be self-contradictory since the subject or predicate of a proposition cannot be fictitious. The best answer to such a question is contemptuous silence. Similarly, if one asks, 'Is the son of the barren woman in question fair or dark?— it would be an instance of impertinence (*anaucitya*). Such instances can be multiplied indefinitely.[54]

It may be urged that *anaucitya* (impertinence) is not a distinct fault and can be subsumed under *arthāntara* (irrelevant digression) or *anavasthā* (infinite series) or *vyāghāta* (contradiction). But a little reflection shows the necessity of regarding *anaucitya* as a separate category of fault. It is true that impertinent questioning of the type we have considered does

involve the fault of *arthāntara* or *anavasthā* or *vyāghāta*. But it is not exhausted by any such fault. Suppose the *vādin* or the judge convicts the opponent of *vyāghāta*. But he may further ask, 'What is *vyāghāta* ?' and every answer may be made the subject of a further question. Charging the opponent with the fault of *anavasthā* will not suffice to silence him. The only solution is to accuse him of *anaucitya* and to bring the debate to an end. The proper attitude towards impertinent questions is refusal to answer them. But as silence is likely to be misunderstood as *apratibhā* (embarrassment, incapacity to answer), the pronouncement of the verdict of defeat on the ground of *anaucitya* is imperative on the part of the president or judge.[55] Śrīharṣa quotes Mahimabhaṭṭa who enumerates *anaucitya* among the varieties of literary defects in the *Vyakti-viveka*, an outstanding work on literary criticism.[56]

(15) *Samavacana* (equalisation)—This is similar to *pratibandī* with this difference that whereas *pratibandī* consists in the allegation of the same or similar fault in the opponent's position as has been urged by the latter against the proponent, *samavacana* rests on the claim of a similar advantage. Thus, it is urged that if the reality of the Absolute Brahman is accepted on the ground of its being supported by logical proofs, the reality of the phenomenal world also ought to be accepted on similar grounds of logical evidence. *Samavacana* acts here as a *tarka* or *reductio ad absurdum* because it establishes the untenability of the monist's contention that the world is a false appearance.[57]

(16) *Ubhayataḥspāśā* (double noose or dilemma)—When an argument is shown to involve the opposite by impaling it on the horns of a dilemma, the result is said to be achieved by the application of this variety of *tarka*. For instance, when the Kevalādvaitin has established the unreality of the worldly phenomena, the opponent asks, " Is your reasoning true or false ? " If the argument is false, the reality of the world will be proved; if it is true, the truth of the argument will prove the reality of the phenomenal world; when the argument is itself

real how can it be asserted that everything other than the Ultimate Reality is false? Thus Kevalādvaita (Absolute Monism) of the Vedāntins will not be established [58] Thus the argument is proved to be false whichever alternative of the two extremes of contradictory opposition be conceded. We find such a *tarka* employed from the times of Nāgārjuna if not earlier (—See *Vigraha-Vyāvartanī*). The *meṇḍaka-pañhas* of *Milinda-pañha* are of this type. Śrīharṣa refers to an *ubhayataḥ-pāśā pratibandi-rajju* (a double-noosed retort). If the Vedāntin urges the fault of *svarūpāsiddhi* in the opponent's argument '*Bhedaḥ pāramārthikaḥ vyāvahārikatvāt*' (Difference is real, because it is empirical), then this same fault can be exposed in the Vedāntin's argument '*Prapañcāḥ mithyā vyāvahārikatvāt*' (Phenomenal entities are unreal because they are empirical). If the Vedāntin urges the fault, the same can be urged against him by the opponent; if he does not say anything, the opponent would win his point. Thus there is difficulty either way, the *ubhayataḥ-pāśā prati-bandirajju* is unavoidable (KhKh., p. 530). This is an instance of a *pratibandi* urging a dilemma. *Ubhayataḥspāśā* is the urging of an undesirable contingency, whichever of the two possible alternatives be accepted.

(17) *Atiprasaṅga* (absurdity of over-extension)—This argument urging an absurdity is employed from very early times. It arises when, according to you, your opponent does not recognise any deciding criterion or determining factor for his view, in which case anything could occur anywhere. For instance, the Sāṁkhya contends that if the effect were not latently present in its cause even before its origination or manifestation, anything could emerge from just anything—which is *atiprasaṅga* (absurdity of over-extension).

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We may, after studying the different varieties of *tarka*, note briefly the conditions of a valid *tarka* as derived from these. These conditions are : (*i*) positive concomitance of the ground (*āpādaka*) and the consequent (*āpādya*). (*ii*) absence of rebuttal by a contradictory *tarka*, (*iii*) *tarka* must result in

the proof of the opposite (*viparyaye paryavasānam*), (*iv*) the consequence entailed by *tarka* must be an undesirable contingency, (*v*) the *tarka* employed must not be favourable to the proof of the opponent's thesis.[59] The default of any of these five conditions gives rise to five faults leading to *tarka* becoming *tarkābhāsa* (simulation of *tarka*). These are termed (i) *mūlaśaithilya* (lack of logical sanction, or weakness at the root, that is to say, in respect of the basic condition), (ii) *mitho-virodha* (mutual contradiction), (iii) *viparyayā'paryavasāna* (failure to culminate in the proof of the opposite), (vi) *iṣṭāpādana* (urging or proving of an issue acceptable to the opponent), (v) *anukūlatva* (being conducive to the proof of the opponent's thesis).[60]

(i) There is the fault of *mūlaśāithilya* when the concomitance of the ground (*āpādaka*) and the consequent (*āpādya*) is found to be wanting. The basic condition of *tarka* as of *anumāna* is the definite knowledge of the necessary concomitance of the *āpādaka* and the *āpādya*, and the subsistence of the *āpādaka* in the subject; otherwise the *tarka* would not be logically valid. An instance of *mūlaśaithilya* is : 'If the soul be atomic, the fruit of its action (*karma*) should not be found elsewhere.' There is no rule that *karma* as subsisting in the doer gives rise to the fruit because the scriptures tell us that the fruit is acquired as determined by the favour or disfavour of the deity to whom that *karma* is addressed; * and it stands to reason that due to the power and will of the Supreme Deity, the fruit can be produced anywhere.[61] This fault corresponds to the *hetvābhāsa vyāpyatvāsiddha*

(ii) There is the fault of *mitho-virodha* when a *tarka* is counter-balanced or opposed by another *tarka*. For instance, one *tarka* is 'If this hill were fireless it would be smokeless' (but there is smoke, so it cannot be fireless).' Against this another *tarka* is set forth, 'If it were possessed of fire, it would be apprehended as such (but it is not so apprehended, so it cannot have fire)'.[62] A better illustration is given in the *Nyāya-pariśuddhi*—If the

* This is the contention of the theistic philosophers.

effect were non-existent before, there would be the contingency of its not being originated afterwards, like the hare's horn. The argument balancing this is : If it were existent before also, there would be the contingency of its not being capable of being produced, just like *prakṛti*, etc. An operation is not always for the sake of manifestation as this is not found to be true of manifestation; otherwise there would be the contingency of infinite series (*anavasthā*) (—*vyakti*, manifestation would require to be manifested and so on infinitely).[63]. The opposition of one *tarka* by another is at bottom a case of mutual opposition or counter-balancing (*satpratiprasaṅga*), corresponding to the *hetvābhāsa, satpratipakṣa*.

(iii) The fault of *tarka* not culminating in the proof of the opposite (*viparyayā'paryavasāna*) consists in the absence of negative concomitance between the ground and the consequent; as the *mūlaśaithilya* consists in the absence of positive concomitance between the ground and the consequent. Lack of negative concomitance makes the *tarka* ineffectual as thereby *tarka* fails to serve its purpose which is to show that the truth lies in the proposition which is the opposite of what is intended to be established by it. For instance, "A whole or composite entity cannot be real because if it were real there would arise the contingency of connection with contradictory attributes (because it may be red in one part and non-red in another and so on)". The whole (*avayavin*) is not regarded by the Buddhists as a real existent, while the Nyāya-Vaiśeṣika accepts its distinct reality. Actually this *tarka*-argument of the Buddhist does not prove the opposite of what is intended to be established, because the apparent contradiction of attributes can be averted by reference to different times or parts. Clay may be small as a lump but big as a jar; a snake is thick at the head and tapering at the tail, and so on. It cannot be said here that wherever there is absence of connection with contradictory qualities there is reality. This fault corresponds to the *viruddha* (contrary) reason wherein the reason employed ends in proving the contrary of the intended probandum.

(iv) There is the fault of *iṣṭāpādana* when from the *tarka* arises something which is not incompatible with the stand-point of the opponent The *tarka* cannot thereby result in *reductio ad absurdum* or the proof of an issue which is opposed to the opponent's position. For instance, the Buddhist argues, 'If God were existent, the Veda though eternal would not be be independent of Him (i.e. would be dependent on Him)". Now the Vedāntins do not believe that the Veda which is eternal is independent, as the Veda is of the nature of the divine command and it is dependent on God in its operation and transmission though it never ceases to exist. The contention of the Buddhist therefore results in something which in not only not offensive to the opponent, but is on the contrary welcomed by him. The *tarka* moreover fails to disprove the oppo..ent's thesis. This fault corresponds to *siddhasādhana* proving what is already accepted or established.

(v) *Anukūlatva* consists in yielding a point which tends to establish the position explicitly advocated by the opponent. For instance, the Buddhist contends that if God were existent, then the *Upaniṣads* also would have to be accorded the status of a *pramāṇa* (source of valid knowledge). This is not only acceptable to the opponent but becomes a proof of the existence of God. There is a subtle difference between *iṣṭāpādana* and *anukūlatva*. In the former variety there is emphasis on something which is regarded by the arguer as unwelcome to the opponent, whereas it is not really so; this has no direct bearing upon the thesis advocated by the opponent, though it is not opposed to his general stand-point In *anukūlatva* on the other hand, the issue shown to emerge is not only unwelcome to the opponent but directly leads to the establishment of the opponent's thesis.[64] *Anukūlatva* corresponds to *viruddha*, proving just the opposite of what one intends to prove (—and also to *siddha-sādhana*, inasmuch as the consequence is admitted by the opponent).

Śrīharṣa in his *Khaṇḍana-khaṇḍa-khādya* (p. 728) has referred to a sixth fault, viz. *āśrayāsiddhi* (fallacy of unreal

subject) as recognised by some. In *tarka*, the ground (*āpādaka*) is invariably fictitous but is assumed to show the absurd consequences that logically follow from it. Here the subject is fictitous in addition. For instance, 'If the sky-lotus were fragrant it would be coveted by all.' This corresponds to the *hetvābhāsa* called *āśrayāsiddhi*.

These are the faults or fallacies of pure *tarka* (*aniṣṭa-prasaṅga* which is also called *taditarāniṣṭa-prasaṅga* or *kevalā-niṣṭaprasaṅga*).[65]

We may now consider briefly the fallacies of the different varieties of *tarka*. The absence of the fundamental character of each makes them *tarkābhāsas* (fallacious *tarkas*).

(1) *Ātmāśrayābhāsa*—If when the fault of *ātmāśraya* is urged, a thing is found not to depend upon itself but upon a thing of the same class, it becomes a case of *ātmāśrayābhāsa*. For instance, knowability (*meyatva*) is universally present (*kevalānvayi*) and subsists in every knowable thing and so in itself also. The attribute of knowability subsists in knowability itself exactly as the attribute of knowability subsists in the jar; knowability is knowable. Yet this is not a case of *ātmāśraya* (self-dependence). There is no incompatibility in the knowability of the jar being itself knowable, because a knowledge of jar and a knowledge of knowability are numerically different as they have reference to two different objects, and so the knowability of jar is numerically different from the knowability of knowability. If it vere meant that the knowability of the jar is numerically the same attribute as the knowability of knowability, the charge of *ātmāśraya* would be unanswerable because one and the same thing cannot be both the locus and content of itself.[66] It may be noted here that some Naiyāyikas do not regard *ātmāśraya* in respect of subsistence as a fault in the case of *meyatva* (knowability), *abhidheyatva* (speakability) etc ; according to them *ātmāśraya*, etc. are faults in these cases only in respect of origination

and cognition. Madhusūdana Sarasvatī contends that *ātmāśraya* in respect of subsistence (*sthiti*) is as much a fault as *ātmāśraya* in respect of origination (*utpatti*) and cognition (*jñapti*).[67]

(2) *Anyonyāśrayābhāsa*-The charge of *anyonyāśraya* (mutual dependence) becomes false when there is a difference of individuals. For instance, cognition leaves a trace or impression (*saṁskāra*) which gives rise to memory which is a kind of cognition. So cognition can be said to give rise to cognition. Yet this is not a case of mutual dependence, because the generator cognition and the generated cognition are two different entities.[68]

(3) *Cakrakābhāsa*—A *cakraka* is vicious when the argument moves in a circle and culminates in showing that the cause and the effect, the locus and the content, the subject and the object are identical. But if the individual cause or the like and the individual effect or the like are different, this charge will not hold good. For instance, the seed produces the sprout, the sprout the plant and the plant the seed. Though the circle starts with the seed as a cause and ends with seed as an effect, yet it is not a case of *cakraka* because the two seeds are numerically different. Thus the charge of *cakraka* or vicious circle against it would come to be only a *cakrakābhāsa*.[69]

(4) *Anavasthābhāsa*—When the infinite series is legitimate (*prāmāṇikī*) the charge that it is vicious becomes a case of *anavasthābhāsa*. We have discussed the nature of *anavasthā*—both legitimate or valid (*prāmāṇikī*) and vicious or invalid (*aprāmāṇikī*).

(5) *Aniṣṭaprasaṅgābhāsa*—We have discussed five (—according to some six) varieties of faults of *tarka* in general. It can be said in general that when the consequence driven home by a *tarka* is not opposed to the position of the opponent, it is a case of *tarkābhāsa* or *aniṣṭaprasaṅgābhāsa*.

(6) *Vyāghātābhāsa*-Contradiction is a very effective weapon of refutation. But this contradiction may be a relative one. A woman who is barren may become, due to medical treatment,

a mother so the contradiction between motherhood and barrenness need not be absolute. Thus the charge of *vyāghāta* (contradiction), when one of the opposite attributes ceases to exist, becomes a case of *vyāghātābhasa.*

(7) *Pratibandyābhāsa*—The *pratibandī* (*tu quoque*) becomes an *ābhāsa* (simulation) when the objection urged by the opponent is shown to be untenable. For instance, the Śaṅkara Vedāntin argues that the phenomenal world is unreal because it is perceptible. The realist or the dualist may answer that the concomitance of perceptibility and unreality is not a natural one but due to an unknown extraneous condition (*upādhi*) and so the unreality of the phenomenal world does not follow from its perceptibility. The Śaṅkara Vedāntin retorts that if an unknown condition makes the concomitance contingent then no inference would be possible. Even the concomitance of smoke with fire may be urged as due to an undetected condition. This is a *pratibandī* and will remain valid if the opponent fails to establish that the suspicion of an undetected condition in the concomitance of smoke and fire is unfounded. If the opponent succeeds in showing the impossibility of the condition, the Vedāntin's *pratibandī* will become invalid or an *ābhāsa* (simulation) of a *pratibandī*, and the opponent's refutation will remain valid unless and until the Vedāntin shows the hollowness of the charge of undetected condition in his argument.

(8) *Avinigama* or absence of decisive proof will come to be fallacious if such proof can be shown to be available.

(9) *Utsarga* or general rule can be set aside by the discovery of a contrary instance, and

(10) *apavāda* if it is shown to be only an apparent one not really serving as an exception to the *utsarga.*

(11-12) *Gaurava* is not a defect if it is shown to be logically necessary, and *lāghava* is no merit if it is found to be inadequate and based on insufficient data.

(13) *Prathamopasthitatva* is of no avail if the thing thought of is not found to be logically valid or necessary.

(14) *Anaucitya* or *vaiyātya* cannot be alleged if the series of queries is backed by a spirit of honest inquiry.

(15) *Samavacana* will be ineffectual if the claim of equal advantage is shown to be false.

(16) *Ubhayataḥ-spāśā* can be shown to be an *ābhāsa* if the alternatives are not opposed to each other, or if the predicates of the alternative propositions are repugnant to our logical sense. For instance, the dilemma 'Is unreality of the world true or false ?' is, as a matter of fact, vitiated by contradiction and cannot be accepted as a legitimate case of opposition. The predicates truth and falsity are by their very nature repugnant to the connotation of the subject 'unreality' and so the dilemma is an absurd one.

(17) *Atiprasaṅga* can be shown to be an *ābhāsa* (simulation) if some criterion or determining principle can be demonstrated.

Tarkābhāsas can be subsumed under *jāti* (sophistical refutation).

Hetu (probans) along with the *hetvābhāsas* (fallacies of the probans) (and also the fallacies of *pakṣa*, *vyāpti* and *dṛṣṭānta*), *tarka* in all its varieties and along with their fallacies, and fallacies of definition, along with the requirements of a valid definition, and the *nigrahasthānas* give us some of the guiding principles of debate and dialectical criticism by showing the logical merit or weakness in an argument or the psychological aberration indicating that the arguer is not equipped with the proper discipline of mind necessary for the successful tackling of scientific problems These are almost unanimously accepted (with the exception of a few of the *nigrahasthānas*) by all the school-men. The sceptics and the absolutists may repudiate the validity as well as the invalidity of these as they hold that nothing can be known or expressed. But ordinarily no school-man would take exception to such principles as "Where the same fault or drawback is found in both parties, one of them should not be charged with it and made to suffer on account of it."[70]

We find the dialectical principles of *ātmāśraya, anyonyāśraya, cakraka, anavasthā, atiprasaṅga, ubhayataḥspāśā* and the like employed from very early times. The *Vigraha-vyāvartanī* and the *Mādhyamika Kārikā* of Nāgārjuna are outstanding among the early works of dialectical criticism, employing much of this dialectical armament. In fact, most of the works employ the weapon of *ubhayataḥspāśā* to refute the opponent's stand. It is, moreover, a common practice with dialecticians to set forth all possible interpretations of a technical term used by the opponent or of a theory or definition of his and to repudiate all of them by showing the absurd conclusion that would follow in each case. The *Tattvopaplavasiṁha* of Jayarāśi (8th century A.D.), besides other works, is especially noteworthy in this respect. It also employs many of these *tarkas* to show the absurdity of the opponent's position. The *Mahābhāṣya* of Patañjali (150 B.C.) though an early work shows full acquaintance with most of these *tarkas* and employs them in refuting rival views and even answers objections based on these. It is remarkable that though Patañjali is an early writer his work can stand a fair comparison in respect of dialectical criticism with the works of later philosophical writers, like Uddyotakara, Dharmakīrti, Akalaṅka, and others. Patañjali anticipates objections of rival thinkers and answers them. We find the following *tarkas* employed in his *Mahābhāṣya* : *itaretarāśraya* (mutual dependence–1.1.8, 6.3.109 etc.); *anyonya-saṁśraya* (same as *itaretarāśraya*—4.1.3.); *cakraka* (argument in a circle-1.3 60, 6.1.135); *anavasthā* (infinite series—2.1.1); *ati-prasaṅga* (over–application amounting to absurdity -1.1.9, 3.1.3, 3.3.19, 6 1.65; 6.1.66- '*atiprasaṅgo vraścādiṣu*'- *Vārttika*); *lāghava* (simplicity-6.1.65), *ubhayataḥ-spāśā rajju* (dilemma-6.1.68); *utsarga* (general rule) and *apavāda* (exception-1.1.54; 3.1.94).[71] From this it can be conjectured that though these principles of dialectical criticism were known from very early times the Naiyāyikas and other logicians did not admit them as logical categories; perhaps on account of the difficulty of accommodating them in the scheme of the author of the *Nyāya-sūtra*.

We have seen that the varieties of *tarka*, viz. *ātmāśraya*, etc. other than *kevalāniṣṭa-prasaṅga* are somewhat different in character from *tarka* as recognised in the *Nyāya-sūtra*, and it is these that were not readily admitted in works on logic We find four of these varieties—*ātmāśraya*, *anyonyāśraya*, *cakraka*, *anavasthā*—systematically mentioned along with *aniṣṭa-prasaṅga* by Udayana and that too in his *Ātmatattva-viveka* (p. 404) while discussing how the invariable concomitance between a thing being a product (*kāryatva*) and having a creator (*sakartṛ-katva*) can be incontestably determined. Such varieties as *prathamopasthitatva*, *lāghava*, *gaurava*, etc. do not directly have logical implications and so the logicians were initially reluctant to admit these as different varieties of *tarka*. They were gradually recognised and that too mostly by logicians of schools other than the Nyāya school. This is a very good illustration of how principles and theories come to be systematically formulated only after they have been in vogue for a very long period. The principles of dialectical criticism came to be incorporated in *pramāṇa-śāstra* or logic only after it gradually became so comprehensive as to include all aspects of dialectical criticism besides treating of the sources of valid knowledge (*pramānas*) and the *prameyas* (cognisables), and the definitions acceptable to the logicians were made precise in view of the criticism by rival thinkers. Dialectical criticism in philosophical writings, as will be discussed later, came to the forefront at a slightly later stage–about the second century A.D. though debates were in vogue and the rules of debate were known much earlier.

NOTES.

1 jala–karṣaṇabījartu-saṁyogāt sasya-sambhavaḥ.
yuktiḥ ṣaḍ-dhātu-saṁyogād garbhāṇāṁ sambhavas tathā.
mathya-manthana(-ka)-manthāna-saṁyogād agnisambhavaḥ.
yuktiyuktā catuṣpāda-sampad vyādhi-nibarhaṇī.
buddhiḥ paśyati yā bhāvān bahukāraṇayogajān.
yuktis trikālā sā jñeyā trivargaḥ sādhyate yayā,—CS., *Sūtrasthāna*, 11.21-25.

ata evānumiyate yat—svakṛtam apārihāryam avināśi paurva-dehikaṁ daiva–saṁjñakam anubandhikaṁ karma, tasyaitat phalam, itaś cā'nyad bhaviṣyatīti, phalād bījam anumīyate, phalaṁ ca bījāt. yuktiś caiṣā—ṣaḍ-dhātu-samudayād garbhajanma, kartṛ-karaṇa-saṁyogāt kriyā, kṛtasya karmaṇaḥ phalaṁ nā'kṛtasya, nā'ṅkurotpattir abījāt, karma-sadṛśaṁ phalaṁ, nā'nyasmād bījād anyasyotpattiḥ iti yuktiḥ—*Ibid.*, 31-3..

2 Atha jijñāsitasya vastuno vyāhatau dharmau vibhāgena vimṛśati kiṁsvid ittham āhosvid nettham iti. vimṛśyamānayor dharmayor ekaṁ kāraṇopapattyā'nujānāti sambhavaty asmin kāraṇam pramāṇam hetur iti kāraṇopapattyā syād evam etan netarad iti.—NB., 1.1.40,

3 Kathaṁ punar ayaṁ tattvajñānārtho na tattvajñānam eveti. anavadhāraṇāt. anujānāty ayam ekataraṁ dharmaṁ kāraṇopapattyā, na tv avadhārayati na vyavasyati na niścinoti evam evedam iti. kathaṁ tattvajñānārtha iti ? tattvajñāna-viṣayā'bhyanujñā-lakṣaṇā'nugrahabhāvitāt prasannād anantarapramāṇa-sāmarthyāt tattvajñānam utpadyata ity evaṁ tattva-jñānārtha iti. —NB., 1. 1. 40;

4 Nanv etat tattvajñānam eva, kim ucyate tattvajñānārtham iti. nedaṁ tattvajñānam anavadhāraṇāt; na hy ayam avadhārayaty evam eveti. kiṁ tv anutpattidharmakeṇa jñātrā bhavitavyam iti pramāṇaviṣayam anu-jānāti. kathaṁ punar ayaṁ tattva-jñānārthaṁ bhavati, pramāṇaviṣaya-vivecanāt; pramāṇa-viṣayam anena vivinakti ayam artho yukta iti. pramāṇāni punaḥ pravartamānāni tarka-viviktaṁ arthaṁ tathābhūtam avagamayantīti. —NV., p. 141.

5 Anumānaṁ tarkaḥ liṅga-liṅgisambandha-smṛtyapekṣatvāt anumānavat. na. tarkasvarūpānavabodhāt—naiva liṅga-liṅgi-sambandha-smṛtyapekṣaḥ tarkaḥ. kathaṁ iti ? dvayasyā'nadhigateḥ. yatra dvayam adhigamyate dharmī sādhanadharmaś ca tatrānumānaṁ pravartate; yatra punar dharmi-mātrādhigatir na liṅgādhigatir asti sa tarkaviṣaya iti. tasmāt liṅga-liṅgi-sambandha-smṛtyapekṣatvam anupapannam. —NV., p. 142.

6 See NVTT, pp. 308-309.

7 Anumānaṁ dharmigata-dharmopalabdhau pravartate na punas tarkaḥ, tarkas tv anyagatadharma-darśanenā'pi pravartate yathā bhavitavyam atra puruṣeṇeti, yathā'smin deśe'śvā vāhyante iti aśva-vāhanaṁ na puruṣa-dharmaḥ so'yam anyagata-dharmopapattyā sthāṇu-vyavaccheda-mātram ūha iti. —NV., p. 142.

8 See '*Inductive Reasoning—A study of Tarka and its Role in Indian Logic*'—Sitansusekhara Bagchi (Calcutta, 1953).

9 Yady api saṁśayasya paścād eva jijñāsā bhavati tathā'pi jijñāsāyāḥ parastād api saṁśayo bhavati, sa cātra vivakṣitaḥ tarkapravṛttyaṅgatvāt, tarkeṇa hi prasaṅgā'paranamnā dvayoḥ pakṣayor ekatara-niṣedhenaika-taraḥ pramāṇa-viṣayatayā'bhyanujñātavya iti viṣaya-pratyāsattyā tarka-

pravṛttiṁ pratyaṅgatā saṁśayasyeti.....yasmin viṣaye pramāṇaṁ pravartitum udyataṁ, tad-viparyayāśaṅkāyāṁ na tāvat pravartate, na yāvad aniṣṭāpattyā viparyayāśaṅkā'panīyate, tadapanaya eva ca svaviṣaye pramāṇa-sambhava iti copapattir iti vyākhyāyate. tayā pramāṇasyopapattyā itikartavyatayā pramāṇasyābhyanujñātasya viśodhite viṣaye pramāṇam apratyūhaṁ pravartatate.—NVTT., pp. 304–305.

Aniṣṭaṁ ca dvividhaṁ prāmāṇika-parityāgo' prāmāṇika-parigrahaś ca. yathā yady udakaṁ pipāsāduḥkhaṁ na śamayet na pīyeta, yadi ca tad eva param antardahet, tadā'viśiṣṭaṁ mām api dahet. — ATV., pp. 235-236.

l Kathaṁ tarhi pramāṇam apy anugṛhṇīyāt, aniyatecchā-vicchedenety uktam. na hi kuryāṁ na kuryām ity aniyatacikīrṣaḥ kartā kiṁcit karoti. aniyatecchā-vicchedaṁ kathaṁ kuryād iti cet, aniṣṭāpatti-nivṛttatvād asya. yathā saviṣā'nnabhakṣaṇodyatasya saviṣam idaṁ yadi bhakṣayiṣya is mariṣyasīty aniṣṭāpatter na bhakṣayeyam iti tatsmaraṇam evecchāvichhittiḥ. —*Kiraṇāvali*, p. 260 (CSS).

12 See TR. I, pp. 196-197.

13 I am indebted to Prof. Bagchi's detailed and learned exposition of Udayana's view. See his '*Inductive Reasoning*', pp. 9-15. He has treated thoroughly the problem of *tarka* in Indian logic in the above-mentioned work. I have mostly accepted his renderings of technical terms and expressions pertaining to *tarka*

14 See *Tattvārtha-bhāṣya*, 1.15.

15 *Laghīyastraya-vivṛti*, 3.2.

16 Also—Upalambhā'nupalambha-sambhavaṁ trikālīkalitasādhya-sādhana-sambandhādyālambanam idam asmin saty eva bhavatītyādyākāraṁ saṁvedanam ūhāparanāmā tarka iti.—PNTL., 3.7,

17 Cf *Hetubinduṭīkā*, p. 20.

18 Vādi Devasūri has proved at great length in his *Syādvāda-ratnākara* pp.500ff that *tarka* is an independent *pramāṇa*. The arguments are substantially the same as those of Hemacandra. The discussion of *vyāpti* in the chapter on Valid Reasoning should be supplemented by the discussion given here.

19 Sandigdhe' rthe' nyatarapakṣānukūla-kāraṇadarśanāt tasmin sambhāvanā-pratyayas tarkaḥ.—NM., I, p. 7.

20 tarkaś ca dvividho viṣaya-pariśodhako vyāptigrāhakaś ceti.—*Dinakarī*, p. 419; also *Nyāyalīlāvatī-Prakāśa*.—pp. 518-9.

21 See *Nyāyalīlāvatī*, pp. 514 ff.

22 *Nyāya-līlāvatī*, p. 518.

23 Vyabhicārajñānaviraha-sahakṛtaṁ sahacāradarśanaṁ vyāptigrāhakam. jñānaṁ niścayaḥ śaṅkā ca. sā ca kvacid upādhisandehāt kvacid viśeṣādarśana-sahita-sādhāraṇa-dharmadarśanāt. tadvirahaś ca kvacid vipakṣabādhaka-tarkāt kvacit svataḥ siddha eva.—TC., p. 662(CSS).

24 Tarkasya vyāptigrahamūlakatvena anavasthā iti cet. — na, yāvad āśaṅkaṁ tarkānusaraṇāt, yatra ca vyāghātena śaṅkaiva nāvatarati tatra tarkaṁ vinaiva vyāptigrahaḥ.— TC., p. 675(CSS). Also—
Śaṅkā ced anumā' sty eva na cec chaṅkā tatastarām.
vyāghātāvadhir āśaṅkā tarkaḥ śaṅkā'vadhir mataḥ.—
—*Nyāya-kusumāñjali* 3.7. (p. 23—CSS).

25 TC., pp. 675-676 (CSS). Śaṅkara Miśra has given in his *Vādivinoda*, p. 58 a brief account of how different logicians have attempted to resolve the contingency of infinite series. The older Naiyāyikas held that doubt is not possible with regard to universally accepted beliefs traditionally handed down. There was another class of Naiyāyikas who held that infinite recurrence of doubt is psychologically impossible as the mind cannot be endlessly preoccupied with one thing or event.

26 NP., p. 324.

27 (Anumānaṁ) punar dvividhaṁ, sādhanānumānaṁ dūṣaṇānumānaṁ ceti. tatrādyaṁ yathā dhūma-pramityā agnipramiti-sādhanam. dūṣaṇānumānam api dvedhā, duṣṭi-pramiti-sādhanaṁ tarkaś ceti. tatrādyaṁ yathā—nedaṁ sva-sādhya-sādhana-samarthaṁ pramāṇa-bādhitatvād ityādi. kasyacid dharmasyāṅgīkāre'rthāntarasyā'' pādanaṁ tarkaḥ. tasya ca pañcāṅgāni. (1) āpādakasyā''pādyena vyāptiḥ, (2) pratitarkeṇā'pratighataḥ, (3) āpādyasyā' niṣṭatvam. tad dvividham-prāmāṇikahānam aprāmāṇika-kalpanaṁ ceti. tatrā''dyaṁ tredhā—dṛṣṭānumānaśruta-hānabhedāt. dvitīyam api adṛṣṭā'nanumitā'śruta-kalpanā-bhedāt trividham. etad eva kalpyānekatve kalpanā-gauravam ity ucyate, (4) āpādyasya viparyaye paryavasānam, (5) parasyā'nanukūlatvaṁ ceti.—PP., p. 36.

Anumānatve'pi tarkasya āpādakā'siddhir adūṣaṇam. parābhyupagama-mātrasya tatra siddhi-padārthatvāt. evam āpādyasya pramāṇavirodho'-pasidddantaś ca na dūṣaṇaṁ. nirdhūmo bhavatīty asādhanāt. yathā sādhanānumāne na vyāptimātraṁ nā'pi pakṣa-dharmatāmātraṁ sādhya-pramiti-sādhanaṁ kiṁ tu militam eva, evam aniṣṭāpādanaṁ viparyaye paryavasānaṁ cobhayaṁ militam evānumiti-sādhanaṁ bhavatīti tarkasya prāmāṇyam upapadyate. so'yaṁ kvacid viparīta-śaṅkā-nirasanadvāreṇa pramāṇānām anugrāhako'pi bhavatīti.—PP., p. 39.

28 Manmate tv aṅgīkṛtena sādhyābhāvena saha anaṅgīkṛtasya sādhanā-bhāvasya vyāpakatvapramā vā. sādhyābhāvāṅgīkāranimittikā sādhanā-

bhāvasyā'ṅgīkartavyatvapramā vā. tarkyate aneneti vyutpattyā tarkaḥ. —TT., Vol. 4, pp. 142-3.

29. Tasmāt tarkaḥ anumāna-viśeṣa eva vyāpti-balena gamakatvāt.—TT., Vol. 4, p. 142.

30 See TT., Vol. 4, pp. 144–146.

31 NK., pp. 173–174. Kiṁ parapakṣābhāva-pratītis tarkaḥ kiṁ vā svapakṣa-sambhāvanā, ādye pakṣe pramāṇam evedaṁ jñātur anityatve saṁsārāpavargayor asambhava iti jñānaṁ yady apramāṇaṁ nāsmād vipakṣābhāvasiddhir, apramāṇena kasyacid arthasya siddher ayogād ity atrāsyā'pravṛttir eva viṣaya-vivekābhāvāt. atha siddhyaty asmād vipakṣābhāvas tadā pramāṇam idaṁ pratyakṣādiṣu kasmiṁścid antarbhaviṣyati.—*Ibid.*, p. 173.

Atha svapakṣa-sambhāvanātmakaḥ pratyayas tarkaḥ, asyotpattau kiṁ kāraṇam. na tāvat svapakṣa-sādhakaṁ pramāṇaṁ, tasyāpravṛtteḥ, tarkeṇa vivecite viṣaye svapakṣa-sādhakaṁ pravartate tad eva yadi tasya kāraṇaṁ suvyaktam anyonyāśrayam. vipakṣābhāve pratīte svapakṣasambhāvanopajāyate iti vipakṣābhāva-pratītir asya kāraṇam iti cet, tarhi vipakṣābhāvaliṅgakam anumānam evaitat parasparā-viruddhayor ekapratiṣedhasyetaravidhinā nāntarīyakatvāt.—*Ibid.*, p. 174.

32 See *Vyomavatī*, p. 533—Sa tu tasmiṁs tad iti rūpatvān niścaya eva.

33 ATV., p. 404.

34 See *Inductive Reasoning*, p. 152—Sitansusekhar Bagchi.

35 Api cātmāśrayo'nyonyāśrayaś cakrakaṁ vyāghāto'navasthā pratibandī cety āpādyair bhidyamānā ṣaṭ-tarkīṣyate.—KhKh., p. 704.

36 Prajñāparitrāṇe tu kevalāniṣṭaprasaṅgam eva dvidhā-kṛtya ṣoḍhā tarka uktaḥ.
ātmāśrayaṇam anyonyāśrayaṇaṁ cakrakaṁ tathā,
anavasthā virodhaś cāsambhavaś cety amī budhair iti.—NP., p. 347.

37 Apare'pi viṣayabhedāt tarkbhedā ātmāśrayādivan mantum ucitāḥ. tad yathā avinigamaḥ utsargaḥ kalpanā-gaurava-lāghave cā'naucityaṁ ceti.—KhKh., p. 717.

38 Tarkapratirūpakatvenā'bhimatānām utsargādīnāṁ khaṇḍanam abhidhātuṁ svarūpam ādarśayati.—Śaṅkara Miśra's commentary on KhKh., p. 718.

39 Avinigamādayas tarka-pratirūpakā ity anye. tarkā evety apare. yuktaṁ caitat, anyatrāntarbhāvayitum aśakyatvāt.—VV., p. 37.

40 See VV., pp. 19–20.

41 Jñānādhikaraṇā lilakṣaṇanirūpaṇadvāreṇa cakrakādyāpatteḥ.—KhKh., p. 143 .

42 KhKh., pp. 707–708.

43 *Inductive Reasoning*, p. 163—Bagchi.

44 *Nyāya-pariśuddhi* with *Nyāyasāra*, pp. 347–348

45 *Nyāya-sāra*, p. 347 on NP.

46 Samānam ity anuttaram...iti bruvann Uddyotakaro yatrobhayor ityādi vadato Bhaṭṭasya pratibhaṭikartavyaḥ.—KhKh., p. 531;

'Yatrobhayoḥ samo doṣaḥ parihāro'pi tatsamaḥ.
naikaḥ paryanuyojyaḥ syāt tādṛśy arthavicāraṇe'.
iti Bhaṭṭavārttikam.—Śaṅkara Miśra's comm. on KhKh., p. 528.

47 *Nyāya-kusumāñjali*, I. pp. 79–80; also *Dinakarī*. pp. 77–78.

48 Compare VV., p. 38—bāhulyadṛṣṭam apekṣya bāhulyadṛṣṭatayā durbalasyānuyogārhatotsargaḥ.

49 Yaṁ tarkaṁ etam ālambyā''huḥ—
"Tasmād bodhātmakatvena prāptā buddheḥ pramāṇatā.
arthānyathātva-hetūttha-doṣajñānād apodyate."—
(Ślv., *Codanāsūtra*, 53, quoted in KhKh., p. 719); also VV., p. 38.

50 *Inductive Reasoning*, pp. 172–173—Sitansusekhar Bagchi.

51 KhKh., p. 721; also VV., p. 38.

52 Laghutvaṁ ca śarīrakṛtam upasthitikṛtaṁ sambandhakṛtaṁ ca.—*Dinakari*, p. 121 on *Siddhānta-Muktāvali*.

53 Śaṅkara Miśra's commentary on KhKh., p. 72?.

54 Prāmāṇika-vyavahāryatvam asamādheya-jatīyatvam anaucityam. etadbhedā eva praśna-vaijātyādayaḥ. avastuni vidhi-niṣedhayoḥ kim icchasītyādi vaijātyam; ghaṭapaṭādikaṁ ca prakṛti-vaijātyaṁ sandhyāvandanādi-parityāgo vyavahāra-vaijātyaṁ kaupīnādi-parityāgaś ceti. etad evā''śritya mūka-vāvadūkayoḥ kataraḥ prāmāṇika iti. yathā laukikānāṁ bhāṣaṇaṁ—piśācā'nurūpo balir iti, tathā magnaś cen nāgalokam paśyati, na hy apratīte Devadattādau kiṁ gauraḥ kṛṣṇo veti vaijātyaṁ vinā praśnam ity ādi śāstre tatra tatrābhidhānam iti.—VV., pp. 38.

55 KhKh., p. 723, and Śaṅkara Miśra's commentary.

56 Doṣaṁ Vyaktiviveke 'muṁ kavilokavilocane.
Kāvyamīmāṁsiṣu prāptamahimā Mahimā'' dṛta.—KhKh., p. 723.

57 Yadi prāmāṇikatvena brahmaṇaḥ satyatvaṁ syāt tulyaṁ prapañcasyā'pīti sāmyāpādanaṁ samavacanam.—*Nyāyasāra* on NP., p. 347.

58 Mithyātvaṁ mithyā vā na vā. yadi mithyā tarhi prapañcasya satyatvena na brahmātiriktaniṣedhasiddhiḥ. yadi na mithyā tarhi tasyaiva satyatvena na brahmā'tiriktaniṣedha-siddhir iti sambhāvita-koṭidvaye'py aniṣṭāpādanam ubhayataḥspāśā.—*Nyāyasāra* on NP., p. 347.

59 Ātmāśrayādi-bhedena tarkaḥ pañcavidhaḥ smṛtaḥ,
aṅga-pañcaka-sampannas tattvajñānāya kalpate.
vyāptis tarkā'pratihatir avasānaṁ viparyaye,
aniṣṭānanukūlatve iti tarkāṅgā-pañcakam.
aṅgānyatama-vaikalye tarkasyā'' bhāsatā bhavet.—TR., pp. 186–187 (vv. 71–73ab); also *Nyāyasāra* on NP., pp. 348–350.

60 Mithovirodha-mūlaśaithilyeṣṭāpādanā'nukūlatva-viparyayā'paryavasānais tarkābhāsatvāt.—ATV., p. 246. See also TR., pp. 188–190, pp. 348–350.

61 Ātmā'nuś cet tatkarmaṇā deśāntare phalaṁ na syād iti. na hi karmaṇaḥ phala-karaṇatvam āśraya—saṁyogādi-mukheneti niyamaḥ. tat-tat-karmasādhyadevatānugraha-nigraha-mukhena tatsiddher āgamikatvāt. parasyā devatāyāś ca vaibhavāt saṁkalpa-mahimnā ca sārvatrikaphala-jananopapatter iti.—NP., p. 348.

62 Tathā hi nāyaṁ parvato niragniḥ nirdhūmatva-prasaṅgāt. nāpy agnimān tathopalabdhi-prasaṅgād ity anayor eka ābhāsaḥ.—ATV., p. 246.

63 Prāg asac cet kāryaṁ paścād api śaśaviṣāṇavad anutpatti-prasaṅga iti. tatra pratiprasaṅgaḥ prāg api sac cet prakṛtyādivad evānutpāda-prasaṅga iti. na hi sarvatra vyaktyartho vyāpāraḥ vyaktau tad-asambhavāt anyathā'navasthādi-prasaṅgāt.—NP., p. 348.

64 See NP., p. 349.

65 Atra vyāptyādyekaika-vaikalyena kevalāniṣṭa-prasaṅgābhāsa-pañcakam udāhriyate.—NP., p. 348.

It can be seen that the fallacies of *tarka* as also the conditions of a valid *tarka* are allied to those of inference and this explains why some logicians (Mādhvas, Rāmānujas, Śrīdhara) include *tarka* under inference (*anumāna*). Only the *bādhita hetvābhāsa* (contradicted probans) cannot have a direct parallel in *tarka* as in the latter the consequent (*āpādya*) entailed by the ground (*āpādaka*) must be absent in the subject, otherwise it would not operate as a *reductio ad absurdum*. The orthodox Naiyāyika has emphasised this difference between *anumāna* and *tarka* which he regards as fundamental.

66 Dr. Bagchi has discussed this point at great length. See *Inductive Reasoning*, pp. 191—200. See also KhKh., p. 706 and Śaṅkara Miśra's commentary on it, p. 707, and *Advaita-siddhi*, p. 805.

67 Yat tu prameyatvādau pramitātvād anyonyavṛttir adoṣa iti, tan na: ātmāśrayādi-tattvadoṣeṇa tatrā'pi pramitatvāsiddheḥ.—*Advaita-siddhi*, p. 805; also Rāmarudrī on *Dinakarī*, p. 101.

68 KhKh., p. 706.

69 KhKh., p. 707.

70 Nanu ca yathā parakīyeṣv anumāneṣu dūṣaṇam uktam evaṁ svānumāneṣv api yathokta-dūṣaṇa—prasaṅge sati sa evā'siddhādhārā' siddhahetvādi-doṣaḥ prāpnoti. tataś ca ya ubhayor doṣo na tenaikaś codyo bhavatīti sarvam etad dūṣaṇam ayuktaṁ jāyata iti.—Candrakīrti's *Vṛtti*. p.34 on the *Mādhyamika Kārikā* (Bibliotheca Buddhica, 1903). Compare—yatrobhayoḥ samo doṣaḥ parihāro'pi tatsamaḥ, naikaḥ paryanuyojyaḥ syāt tādṛśy artha-vicāraṇe.

71 *Tarkas* employed in Patañjali's *Mahābhāṣya* :—

(a) *Itaretarāśraya*—(i) 1.1.8—Itaretarāśrayaṁ tu bhavati. Kā itaretarāśrayatā? Sato'nunāsikasya saṁjñayā bhavitavyam, saṁjñayā ca nāmānunāsiko bhāvyate, tad itaretarāśrayaṁ bhavati. itaretarāśrayāṇi ca kāryāṇi na prakalpante. anunāsika-saṁjñāyām itaretarāśraye uktam. kim uktam, 'siddhaṁ tu nitya-śabdatvāt' iti; nityaḥ śabdaḥ. nityeṣu ca śabdeṣu sato' nunāsikasya saṁjñākriyate, na saṁjñayā' nunāsiko bhāvyate. (ii) 6.3.109—Ke punaḥ śiṣṭāḥ, vaiyākaraṇāś ca śāstrajñāḥ, yadi tarhi śāstrapūrvikā śiṣṭiḥ śiṣṭipūrvakaṁ ca śāstraṁ tad itaretarāśrayaṁ bhavati. itaretarāśrayāṇi ca na prakalpante.

(b) *Anyonyāśraya*—4.1.3—anyonyasaṁśrayaṁ tv etat, anyonyasaṁśrayaṁ tv etad bhavati. strīkṛtaḥ śabdaḥ, śabda-kṛtaṁ ca strītvam, etad itaretarāśrayaṁ bhavati, itaretarāśrayāṇi ca na prakalpante.

(c) *Cakraka*—(i) 1.3.60—Punar ṛcchibhāvaḥ punar ād iti cakrakam avyavasthā prāpnoti, (ii) 6.1.135—'Tathā cā'navasthā' (*Vārttika*)—nanu suṭ punar dvirvacanam iti cakrakam avyavasthā prasajyeta.

(d) *Anavasthā*—2.1.1—Kiṁ punaḥ kāraṇam arthā nā''diśyante. tac ca lāghavārtham. lāghavārthaṁ hy arthā nā''diśyante, avaśyaṁ hy anenārthān ādiśatā kenacic chabdena artha-nirdeśaḥ kartavyaḥ syāt. tasya ca tāvat kena kṛtaḥ yenā'sau kriyate. atha tasya kenacit kṛtaḥ, tasya kena kṛtaḥ, tasya kena kṛta ity anavasthā ca syāt, asambhavaḥ khalv apy arthādeśanasya. kohi nāma samartho dhātu-prātipadika-pratyaya-nipātānām arthān ādeṣṭum.

(e) *Atiprasaṅga*—(i) 1.1.9—'Savarṇa-saṁjñāyāṁ bhinna-deśeṣv atiprasaṅgaḥ prayatna-sāmānyāt.' (*Vārttika*) "siddhaṁ tv āsye tulya-deśa-prayatnaṁ savarṇam" (*Vārttika*). (ii) 3.1.3—'Avacane hi ṅnitkitsu atiprasaṅgaḥ."(*Vārttika*), akriyamāṇāyāṁ hy asyāṁ paribhāṣāyāṁ

kriyamāṇe'pi pratyaya-saṁjñā-saṁniyogena''dyudāttatave ñnitkitsu atiprasaṅgaḥ syāt, autsı kaṁsikī ātreyiti, atra hi paratvāl lopo ñinnitkitsvarān bādheta. naiṣa doṣaḥ. ñinnitkitsvarāḥ pratyaya-svarasyā'pavādāḥ. na ca'pavādaviṣaya utsargo' bhiniviśate. 'pūrvaṁ hy apavādā abhiniviśante paścād utsargāḥ', 'prakalpya cā'pavāda-viṣayaṁ tata utsargo'bhiniviśate'. na tāvad atra kadācit pratyaya-svaro bhavati, apavādān ñnitkitsvarān pratıkṣate. (iii) 3.3.19—Tenā'-tiprasaktam iti kṛtvā niyamo'yaṁ vijñāyate-akartari saṁjñāyām eveti.

(f) *Lāghava*-6.1 65—Atha kimartham nakāram upadiśya tasya nakāra ādeśaḥ kriyate, na nakāra evopadiśyate, lāghavārtham ity āha, katham, aviśeṣeṇāyaṁ nakāram upadiśya tasya nakāram ādeśam uktvā tasya laghunopāyena natvam nirvartayati—'upasargād asamāse'pi ṇopadeśasya' (8.4.14) iti. itarathā hi yeṣāṁ ṇatvam iṣyate teṣāṁ tatra grahaṇaṁ kartavyaṁ syāt.

(g) *Ubhayataḥspāśā rajju*—6.1.68—tad yathā—kuṭatat kāṣṭhatat—ity atra saṁyogāntalopāt saṁyogādılopo balıyān bhavati nanu ca ḍatve kṛte na bhaviṣyati. asiddhaṁ ḍatvaṁ tasyā'siddhatvāt prāpnoti. siddhakāṇḍe paṭhitaṁ vasvādıṣu ḍatvaṁ sau dırghatva iti tatra sau dīrghatva-grahaṇaṁ na kariṣyate vasvādiṣu ḍatvaṁ siddham ity eva evam apy apadāntatvān na prāpnoti. atha sāv api padaṁ bhavati rājā takṣā-na-lope kṛte vibhakteḥ śravaṇaṁ prāpnoti. saiṣobhayataḥ-spāśā rajjur bhavati.

(h) *Utsarga* and *apavāda*—1.1.54 'Alo' ntyasayā''deḥ parasyānekāl śit sarvasyety apavāda-vipratiṣedhāt sarvādeśaḥ' (*Vārttika*)-'alo'ntyasya' ity utsargaḥ. tasya 'ādeḥ parasya' 'anekāl śıt sarvasya' ity apavādaḥ. apavādavipratiṣedhāt sarvādeśo bhaviṣyati. See also 3.1.94.

(i) *Vaiyātya* occurs in 7.2 19 but has no technical sense.

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and

ABBREVIATIONS

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—	Abhidharma-samuccaya of Asaṅga–Prahlad Pradhan (Viśva Bhāratī Series, 1950).
ATV	Ātmatattvaviveka of Udayana (CSS).
UH	Upāyahṛdaya (Pre-Diṅnāga Buddhist Texts on Logic—GOS).
—	Kiraṇāvalī of Udayana (CSS).
KhKh	Khaṇḍana-khaṇḍa-khādya of Śrīharṣa (Medical Hall Press, Benares).
CS	Caraka-saṁhitā (NSP, 1941).
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TC(BI)	Tattva-cintāmaṇi of Gaṅgeśa Upādhyāya (with Dīdhiti and Dīdhiti-vṛtti) (BI, Calcutta).
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TS	Tarka-saṅgraha with Dīpikā of Annaṁbhaṭṭa—Athalye and Bodas (BSS).
TR	Tārkika-rakṣā of Varadarāja (Reprint from the Pandit—Medical Hall Press, Benares, 1903).
DMS	Daśaślokī-Mahāvidyā-sūtra of Kulārka Paṇḍita (See Mahāvidyā-viḍambana)
NK	Nyāyakandalī of Śrīdhara (--containing the text of Praśastapāda-bhāṣya) (Vizianagram Sanskrit Series, 1895).
NKC	Nyāyakumudacandra of Prabhācandra (Māṇikyacandra Jaina Grantha Mālā).
NKu	Nyāya-kusumāñjali of Udayana (CSS).
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NP	Nyāya-pariśuddhi of Veṅkaṭanātha with Nyāya-sāra of Śrīnivāsa (CSS).
NyP	Nyāya-praveśa of Śaṅkarasvāmin (GOS, 1930).
NyB	Nyāya-bindu of Dharmakīrti (Nūtana Sanskrit Series, Akola, 1952).

NyBT	Nyāyabindu-ṭīkā of Dharmottara (Nūtana Sanskrit Series, Akola, 1952).
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NVTT	Nyāya-vārttika-tātparyaṭīkā of Vācaspati (KSS).
NVTTP	Nyāya-vārttika-tātparya-ṭīkā-pariśuddhi of Udayana (BI, Calcutta).
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NS	Nyāya-sūtra of Gautama (KSS).
—	(The) Nyāya-sūtras of Gautama with Vātsyāyana's Bhāṣya and Uddyotakara's Vārttika-English Translation by Ganganatha Jha (Indian Thought Series, Allahabad).
—	Nyāya-sūtra-vivaraṇa of Rādhā Mohana Vidyā Vācaspati Gosvāmī Bhaṭṭācārya (Medical Hall Press, Benares, 1903).
NSV	Nyāya-sūtra-vṛtti of Viśvanātha (ASS, 1922).
—	Nyāyāmṛta of Jayatīrtha (Madhva Vilāsa Press).
NyA	Nyāyāvatāra of Siddhasena Divākara.

— Nyāyāvatāra-vārttika-vṛtti of Śānti-sūri—edited with Introduction and Notes by Pt. Dalsukh Malavaniya (SJG).

— Patra-parīkṣā of Vidyānanda (Sanātana Jaina Grantha Mālā, Kāśī, 191 ·).

PMS Parīkṣā-mukha-sūtra of Māṇikyanandin.

— Pūrva-Mīmāṁsā-sūtra of Jaimini (1.1. 4-5) (ASS).

— Prakaraṇa-pañcikā of Śālikanātha (SS).

PNTL Prāmāṇa-naya-tattvālokālaṅkāra of Vādi Devasūri with Ratnākarāvatārikā of Ratnaprabhācārya (Yaśovijaya Jaina Grantha Mālā, Benares).

PP Pramāṇa-paddhati of Jayatīrtha-T. R. Krishnacarya (Modern Printing Works, Madras, 1917)

— Pramāṇa-parīkṣā of Vidyānanda (Jaina Siddhānta Prakāśinī Saṁsthā, Calcutta).

PM Pramāṇa-mīmāṁsā of Hemacandra with his own vṛtti-edited with Introduction and Notes by Pt. Sukhlal Sanghavi (SJG).

— Pramāṇā mīmāṁsā—A Critique of the Organ of Knowledge—English Translation of Pramāṇā-mīmāṁsā by Satkari Mookerjee and Nathmal Tatia (Bahadur Singh Singhi Jaina Series, Calcutta, 1946).

PV Pramāṇa-vārttika of Dharmakīrti with Manoratha-nandin's commentary–edited by Rāhula Sāṅkṛtyāyana

— Pramāṇa-vārttika—Svārthānumāna, with svopajña commentary by Dharmakīrti.
(Hindu Viśva Vidyālaya, Benares).

— Pramāṇa-samuccaya of Diṅnāga —H. R. Iyengar (Mysore University, 1930).

PKM Prameya-kamala-mārtaṇḍa of Prabhācandra (NSP).

PB	Praśastapāda-Bhāṣya (KSS).
—	Prasthāna-ratnākara of Puruṣottama (CSS).
—	Pre-Diṅnāga Buddhist Texts on Logic—Tucci (GOS) --comprising besides others Upāyahṛdaya and Tarka-śāstra.
—	Bṛhatī of Prabhākara (CSS).
BS	Bodha-siddhi or Nyāya-pariśiṣṭa of Udayana (Calcutta Sanskrit Series, 1938).
BP	Bhāṣā-pariccheda with Siddhānta Muktāvalī of Viśvanātha (NSP, 193?)
MVV	Mahāvidyā-daśa-ślokī-vivaraṇa- (author unknown) (see Mahāvidyā-viḍambana, GOS).
MVVT	Mahāvidyā-daśa-ślokī-vivaraṇa-tippaṇa of Bhuvana-sundara (see Mahāvidyā-viḍambana, GOS).
MVVi	Mahāvidyā-viḍambana of Vādīndra with commentary
MVViVD	Mahāvidyā-viḍambana-vyākhyāna-dīpikā of Bhuvana-sundara (GOS) (This work contains Daśaślokī-mahāvidyāsūtra and other works on mahāvidyā).
MK	Mādhyamika Kārikā of Nāgārjuna with Prasannapadā
MKV	Vṛtti of Candrakīrti (BB).
—	Mānamanohara of Vādivāgīśvarācārya (Vārāṇasī, 1973)
—	Mānasollāsa of Someśvara (relevant portion) (GOS)
—	Yama-aṣṭaka of Haribhadra
—	Vāda-aṣṭaka of Haribhadra
VN	Vādanyāya of Dharmakīrti with Śāntarakṣita's commentary—Rāhula Sāṅkṛtyāyana (Appendix to JBORS, Vol. 21 and 22).

VV Vādi-Vinoda of Śaṅkara Miśra (Śyāmācaraṇa Saṁskṛta Granthāvali, Indian Press, Prayāga, 1915).

— Vādopaniṣad-dvātriṁśikā of Siddhasena

ViV Vigrahavyāvartanī with svopajña vṛtti of Nāgārjuna-K. P. Jayaswal and Rāhula Sāṅkṛtyāyana (Appendix to JBORS, Vol. 23).

— Vedānta-paribhāṣā of Dharmarājā Ihvarī ıdra (Ramkrishna Mission, Calcutta).

— Vaiśeṣika Darśana with Praśastapāda's Bhaṣya and Śaṅkara Miśra's Upaskāra (KSS).

— Vaiśeṣika Darśana--Praśastapāda's Bhāṣya and Vyomavatī of Vyomaśiva (CSS).

VS Vaiśeṣika-sūtra of Kaṇāda (KSS).

— Vaiśeṣika-sūtra of Kaṇāda with the commentary of Candrānanda--Muni Śrī Jambūvijayajī (GOS, 1961).

— Sābara-bhāṣya on Pūrva Mīmāṁsā-sūtra (I.1. 4 - 5).

— Śābara-bhaṣya, Vol. 1, Translation by Ganganatha Jha (GOS).

ŚD Śāstradīpikā of Pārthasārathi Miśra (NSP) 1915).

Ślv Ślokavārttika of Kumārila with Tātparya--ṭīkā of Bhaṭṭombeka (Madras University Sanskrit Series, 1940).

Ślv Ślokavārttika of Kumārila with Pārthasārathi Miśra's commentary Nyāyaratnākara (CSS).

— Ślokavārttika—Translation by Ganganatha Jha (BI).

STT Sanmati-tarka-ṭīkā (-Tattvabodhavidhāyinī or Vādārṇava) of Abhayadeva on Siddhasena Divākara's Sanmati- tarka- prakaraṇa (Gujarat Vidyapitha, Ahmedabad).

- Saptapadārthī of Śivāditya (L.D. Institute of Indology, Ahmedabad).

SDS — Sarvadarśana-saṅgraha of Mādhava-edited by MM. Vāsudeva Śāstrī Abhyaṅkara, Poona).

SK — Sāṁhya Kārikā of Iśvara-Kṛṣṇa with the commentaries of Māṭhara, Gauḍapāda and Vācaspati; and also Jayamaṅgalā.

SM — Siddhānta-Muktāvalī of Viśvanātha with Dinakarī and Rāmarudrī (NSP, 1933).

SV — Siddhiviniścaya with Vṛtti of Akalaṅka and Ṭīkā of Anantavīrya (Bhāratīya Jñāna Pīṭha).

SVR — Syādvādaratnākara of Vādi Devasūri (Ārhata Mata Prabhākara, Motilal Ladhaji, Poona).

— Hetubindu of Dharmakīrti with Ṭīkā of Arcaṭa and Āloka of Durveka Miśra (GOS, 1949).

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— Aṅguttara Nikāya (NDS).

— Aṭṭhasālinī of Buddhaghosa-P. V. Bapat and R. D. Vadekar (Bhandarkar Oriental Series, Poona) (1942).

AdS — Advaita-siddhi of Madhusūdana Sarasvatī(NSP,1917).

AYD — Anuyogadvārasūtra with vṛtti of Maladhārī Hemacandra (NSP, 1928).

— Anuyogadvārasūtra–cūrṇi with vṛtti of Haribhadra (NSP, 1918-Śreṣṭhī Devacandra Lalbhai Jaina Pustakoddhāra).

AK — Abhidharmakośa of Vasubandhu — Rāhula Sāṅkṛtyāyana.

AKV — Abhidharmakośa-vyākhyā, 1-3 of Yaśomitra—Narendra Natha Law (Calcutta)

— Abhidharmadīpa with Vibhāṣāprabhā-vṛtti of Vimalamitra—edited with Introduction by Padmanābha Jaini (K. P. Jayaswal Research Institute, Patna).

— Arthaśāstra of Kauṭilya, Part 1—R. P. Kangle (University of Bombay (1915).

Utd.Sū. Uttarādhyayana-sūtra (NSP).

— (Eighteen Principal) Upaniṣads (Vaidika Saṁśodhana (Maṇḍala, Poona).

Ait. Br. Aitareya Brāhmaṇa (ASS).

— Kathāvatthu (NDS).

— Kathāvatthu—Points of Controversy (Translation)—S. Z. Aung and Mrs. Rhys Davids (Pali Text Society, London, 1915).

— Kathāvatthu-aṭṭhakathā --The Debates-Commentary (Translation)—B. C. Law (Pali Text Society, London, (1940).

— Kaliviḍambana of Nīlakaṇṭha Dīkṣita.

— Kalpasūtra (Jainānanda Press, Surat. 1936).

— Kāmasūtra of Vātsyāyana CSS).

— Kāvyaprakāśa of Mammaṭa—Jhalkikar (BORI).

— Kāvyamīmāṁsā of Rājaśekhara (GOS).

— Kāvyādarśa of Daṇḍin (BORI, 1938).

— Kāvyānuśāsana of Hemacandra, Vol. 1-2—edited by R. C. Parikh (Mahavira Jaina Vidyalaya, Bombay, 1938).

— Kāvyālaṅkāra of Bhāmaha—C. Sankara Rama Sastri Mylapore, Madras, 1956).

— Gauḍapāda-Kārikā (ASS).

— Catuḥ-śataka of Āryadeva (Part-2)—Viśva Bhāratī Series, Calcutta).

— Jalpakalpalatā of Ratnamaṇḍana (Śreṣṭhī Devacandra Lalbhai Jaina Pustokoddhāra, 11–Bombay, 1912).

— Tāṇḍya-mahābrāhmaṇa (CSS).

— Taittirīya Āraṇyaka (ASS).

— Tattva-pradīpikā or Citsukhī of Citsukha (Udāsīna Saṁskṛta Vidyālaya, Kāśī).

— Daśavaikālika-sūtra with Bhadrabāhu's Niryukti and Haribhadra's Bṛhad-vṛtti (NSP, 1918)

DN Dīgha Nikāya (NDS).

— Dharmakośa, Vol. 1, Part 1 (Prājña Pāṭhaśālā, Wai).

— Dhvanyāloka of Ānandavardhana with Locana of Abhinavagupta (and also Bālapriyā and Divyāñjana) (KSS, 1940).

— Dhvanyāloka or Theory of Suggestion in Poetry (Translation)-K. Krishnamoorthy (Oriental Book Agency, Poona, 1955).

— Nāṭyaśāstra of Bharata with Abhinava-bhāratī (GOS).

— Niyamasāra of Kundakundācārya (Sacred Books of the Jainas).

— Nirukta of Yāska, Vol. 1—V. K. Rajvade (BORI, 1940).

— Niśītha-sūtra with Bhāṣya (Sanmati Jñāna Pīṭha, Agra).

— Pañcāstikāya of Kundakunda (Rāyacandra Jaina Śāstramālā).

— Paribhāṣenduśekhara of Nāgojī Bhaṭṭa—F. Kielhorn (BSS).

— Prabhāvakacarita of Prabhācandra (SJG).

— Pravacanasāra of Kundakundācārya-A. N. Upadhye.

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— Brahmasūtra with Śaṅkara's Bhāṣya (NSP).

— Bhagavatī-sūtra (Ahmedabad).

— Bhaviṣya Purāṇa-Pariśiṣṭa—Bhagavad-māhātmya, 30.

— Majjhima Nikāya (NDS).

MBH Mahābhārata (Critical Edition, BORI).

MBH Mahābhārata, 13 (Calcutta Edition).

— Mahābhāṣya of Patañjali (NSP).

— (Lectures on) Mahābhāṣya of Patañjali, Vol. 1 — P. S. Subrahmanya Sastri (Thiruvaiyaru, 1960).

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— Milindapañho—Questions of King Milinda (Translation) Rhys Davids (SBE, 35 and 36).

— Mudritakumudacandra of Śrī Yaśaścandra (Jaina Yaśovijaya Grantha Mālā, 8, Kāśī).

YS Yoga-sūtra with Vyāsa-bhāṣya, etc. (KSS, 110).

— Rasagaṅgādhara of Jagannātha (Tilaka Mahārāṣṭra Vidyāpīṭha, Poona).

— Rāmāyaṇa of Vālmīki (NSP).

— Ṛgveda-Prātiśākhya and its English Translation by Mangal Deva Sastri.

LA Laṅkāvatāra-sūtra (Kyoto, Otani University Press, 1956).

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ViBh Viśeṣāvaśyakabhāṣya of Jinabhadra with the Commentary of Maladhārī Hemacandra (Ahmedabad).

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HIL A History of Indian Logic–Satīśacandra Vidyābhūṣaṇa (Calcutta University, 1921).

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SOME ABBREVIATIONS

ASS — Ānandāśrama Sanskrit Series
BB — Bibliotheca Buddhica
BI — Bibliotheca Indica
BORI — Bhandarkar Oriental Research Institute
BSS — Bombay Sanskrit Series
CSS — Chowkhamba Sanskrit Series
GOS — Gaekwad's Oriental Series
JBORS — Journal of the Bihar and Orissa Research Society
KSS — Kāśī Sanskrit Series
NDS — Nālandā Devanāgarī Pāli Series
NSP — Nirṇaya Sāgara Press Edition
SBE — Sacred Books of the East Series
SJG — Singhi Jaina Grantha Mālā

ERRATA

Page	line	Incorrect	Correct
2	34	premises	premisses
3	16	tmiddle	middle
3	19–20	destrucively	destructively
3	32	ethm	them–
10	28	men)... gods.	men...... gods).
64	29	śrotārom	śrotāram
97	11	∘dosāh	∘doṣāḥ
124	12	Alaṅka	Akalaṅka
158	33	vibhagajā'∘	vibhāgajā'∘
160	10	kārarka	kāraka
183	18	pradhaṁsā∘	pradhvaṁsā∘
211	4	cinomprehension	incomprehension
216	1	or	on
216	8	latter	later
228	12	Ṭātparya Tīkā	Tātparya Ṭīkā
240	33	member	number
257	14	esablished	established
330	2	Gods'	God's
351	33	state	stage
351	34	states	stages
352	27	the sis isseṭ	thesis is set
366	14	evedence	evidence
389	3	anumati	anumiti
415	32	calls	call
419	31	Bhaṭṭas	Bhāṭṭas
432	8	Vhe	The
439	5	*Pratyasa-*	*Pratyakṣa-*
480	36	noth ehill	on the hill
491	36	f *tar'ak* zivo thsi	of this tarka, viz.

pp. 26–213 : 'embarrass' is printed as 'embarass' at nine places. The error is regretted.